

Cornell University

ANNOUNCEMENTS

Graduate School of Business and Public Administration



1968-69

ACADEMIC CALENDAR

FALL SEMESTER

1968-69^a

Registration and opening exercises, first-year students	F, Sept. 13
Registration, returning students	S, Sept. 14
First semester instruction begins, 8:00 A.M.	M, Sept. 16
<i>Thanksgiving Recess</i>	
Instruction suspended, 1:10 P.M.	W, Nov. 27
Instruction resumed, 8:00 A.M.	M, Dec. 2
<i>Christmas Recess</i>	
First semester instruction ends, 1:10 P.M.	S, Dec. 21
Independent study period begins	M, Jan. 6
Examinations begin	M, Jan. 13
Examinations end	T, Jan. 21
Intersession begins	W, Jan. 22

SPRING SEMESTER

Registration, continuing students	F, Jan. 31
Registration, new students	S, Feb. 1
Second semester instruction begins, 8:00 A.M.	M, Feb. 3
<i>Spring Recess</i>	
Instruction suspended, 1:10 P.M.	S, Mar. 29
Instruction resumed, 8:00 A.M.	M, Apr. 7
Second semester instruction ends, 1:10 P.M.	S, May 17
Independent study period begins	M, May 19
Examinations begin	M, May 26
Examinations end	T, June 3
Commencement Day	M, June 9

* The dates shown in the Academic Calendar are subject to change at any time by official action of Cornell University.

CORNELL UNIVERSITY ANNOUNCEMENTS

Volume 60. Number 4. August 19, 1968. Published twenty-four times a year: twice in March, April, May, June, July, September, and November; four times in August and October; and once in January and December. Published by Cornell University at Sheldon Court, 420 College Avenue, Ithaca, New York 14850. Second-class postage paid at Ithaca, New York 14850.

GRADUATE SCHOOL OF BUSINESS
PUBLIC ADMINISTRATION



Cornell University

Graduate School of
Business and Public
Administration

1968-69



CONTENTS

I. INTRODUCTION	Page
Faculty, Staff, and Advisory Council	1
The School and the University	13
Education for Management	14
II. MASTER'S DEGREE PROGRAMS	
Approach and Content	17
Business Administration	18
Public Administration	24
Hospital and Medical Care Administration	29
Law and Administration	31
III. THE CURRICULUM	
The Core Program	33
Elective Courses	39
IV. ADMISSIONS AND STUDENT AFFAIRS	
Admissions Standards and Procedures	64
Costs and Financial Assistance	67
Composition of the Student Body	71
Student Activities	71
Student and Alumni Services	74
V. DOCTORAL AND RESEARCH PROGRAMS	
Approach and Content of the Doctoral Program	77
Requirements	81
Admissions and Financial Assistance	82
Research Programs	83
Publications	84
Library Research	85
VI. SPECIAL PROGRAMS	
Cornell Executive Development Program	87
Health Administration Development Program	88
Agribusiness Executives Program	88
Cornell Institute for Administrators of Long-Term Care Institutions	88
Cornell Career Education Awards Program	89
Food Distribution Program	89
International Programs	90
COURSE INDEX	92



I. INTRODUCTION

Faculty, Staff, and Advisory Council

Listed below are the officers of administration, the faculty, the research associates, and the administrative staff of the School. Brief descriptions of the background and interests of those currently teaching in the School are presented. The School's Advisory Council is also noted.

Administration of the University

JAMES A. PERKINS, President of the University.
DALE R. CORSON, University Provost.
MARK BARLOW, JR., Vice President for Student Affairs.
JOHN E. BURTON, Vice President—Business.
LEWIS H. DURLAND, University Treasurer.
W. KEITH KENNEDY, Vice Provost.
FRANKLIN A. LONG, Vice President for Research and Advanced Studies.
E. HUGH LUCKEY, Vice President for Medical Affairs.
THOMAS W. MACKESEY, Vice President for Planning.
PAUL L. MCKEEGAN, Director of the Budget.
ROBERT D. MILLER, Dean of the University Faculty.
STEVEN MULLER, Vice President for Public Affairs.
ARTHUR H. PETERSON, University Controller.
ROBERT L. SPROULL, Vice President for Academic Affairs.
NEAL R. STAMP, Secretary of the Corporation and University Counsel.

Administration of the School

DAVID A. THOMAS, M.B.A., Ph.D., C.P.A., Acting Dean of the School.
RICHARD R. WEST, M.B.A., Ph.D., Associate Dean for Planning and Development.
DOUGLAS R. BROWN, M.S., Director of the Health Administrators Development Program.
THOMAS R. DYCKMAN, Ph.D., Director of the Doctoral Program.
FRANK F. GILMORE, S.M., Director of the Executive Development Program.

CHARLES G. McCORD, M.A., Director of Placement and Alumni Affairs and Assistant Director of the Executive Development Program.

ROBERT E. SHEARER, M.B.A., Director of Admissions and Student Affairs.

ROBERT W. SHIVELY, Ed.M., Assistant to the Dean.

WILLIAM H. STARBUCK, Ph.D., Editor of the *Administrative Science Quarterly*.

RODNEY F. WHITE, M. Comm., Ph.D., Coordinator for the Sloan Institute of Hospital Administration.

Faculty

DOUGLAS E. ASHFORD, M.A. (Oxford), Ph.D. (Princeton), Associate Professor of Public and International Affairs.

- Professor Ashford's research and teaching are focused on the problems of modernization and political development in the less developed parts of the world. His several books and articles in this field draw heavily on research he has undertaken in North Africa. He has served as an Area Studies Director in a Peace Corps Training Program and as a consultant for the Institute for Defense Analyses. He is also an Associate Professor in the Department of Government and serves as Director of Cornell's Center for International Studies.

JANET C. BALLANTYNE, M.P.A. (Syracuse), Visiting Lecturer in Public Administration.

- Miss Ballantyne's interest in the implementation of development planning is grounded in experience which she has had in this country and overseas. She has served as a senior planner for the New York State Bureau of Urban Affairs as a research assistant to the Ford Foundation Advisory Team for the Metropolitan Planning Organization of Calcutta, India, and as an economist for Peru's National Office of Planning and Urbanization in Lima. She comes to the School from her most recent post as an economist in the Central Reserve Bank of Peru.

ROGER M. BATTISTELLA, M.P.H., Ph.D. (Michigan), Associate Professor of Medical Care Organization.

- Formerly a staff member of the U.S. Senate Special Committee on Aging and health consultant to the New York State Legislature, Professor Battistella is interested in the organization and financing of health services and medical sociology. He has done research on utilization of health services under voluntary insurance plans and the health behavior of aged and middle-aged persons. He has written on health planning and serves as a Seminar Chairman in the School Health Administrators Development Program.

FREDRICK, T. BENT, Ph.D. (Chicago), Associate Professor of Public Administration.

- International and comparative administration are Professor Bent's chief interests. He serves as Home Staff Coordinator of the School's contract with the Agency for International Development providing technical assistance to the Middle East Technical University in Ankara, Turkey; he spent two years in Turkey under that program. He has also served as Acting Editor of the *Administrative Science Quarterly* and as Associate Director of Cornell's Center for International Studies.

HAROLD BIERMAN, JR., M.B.A., Ph.D. (Michigan), Professor of Accounting and Managerial Economics.

- Professor Bierman's interests are in the areas of measuring and communicating financial information and business decision making with the aid of quantitative techniques. He has had experience in public accounting and industry and is the author of a number of books and articles in the fields of accounting, finance, taxation, and quantitative analysis. He is a Coordinator of the School's Executive Development Program.

EARL BROOKS, M.S. (American University), Professor of Administration.

- Professor Brooks teaches in the fields of organizational behavior and personnel management. He serves as a Coordinator of the School's Executive Development Program and as a management consultant in this country and overseas. He has published several articles on delegation, labor relations, communications, management by objectives, and management development.

DOUGLAS R. BROWN, M.S. (Columbia), Lecturer in Hospital Administration.

- Mr. Brown joined the Cornell faculty after serving in an administrative capacity in several hospitals. His research commitment is in the area of planning for health services. He is the Executive Director of the School's Health Administrators Development Program.

JOSEPH B. BUGLIARI, LL.B. (Cornell), Associate Professor of Agricultural and Business Law.

- Professor Bugliari was formerly an associate with the firm of Royall, Koegel, and Rogers in New York and an assistant to an Associate Justice of the Appellate Division of the New York Supreme Court, Third Department. He is interested in the law pertaining to farming operations, business associations, estate planning, and legal problems in the hospital-health area.

LISLE C. CARTER, JR., LL.B. (St. John's), Visiting Professor of Public Administration.

- Although he has devoted a portion of his career to the private practice of law, Professor Carter has been most active in the area of social and urban problems.

He has been affiliated with the National Urban League, the Office of Economic Opportunity, and most recently served as Assistant Secretary of HEW for Individual and Family Services. His interests have included programs for the handicapped and the achievement of social welfare through planning, participation, and manpower. In the fall of 1968, Professor Carter will participate in the School's new "Issues in the Environment" course. During the spring semester he will offer a course in urban issues.

RICHARD W. CONWAY, Ph.D. (Cornell), Professor of Computer Science.

- Professor Conway specializes in the fields of operations research and computer science. He has been a consultant to a number of large companies and to the Rand Corporation in these fields. He is currently Director of National Science Foundation research projects on the theory of scheduling and on computer language development. He is also Director of Computer Services at Cornell.

ROBERT W. DALY, M.D. (State University of New York at Syracuse), Visiting Professor of Administrative Medicine.

- Dr. Daly's major interests are in the fields of personality theory, psychopathology, psychoanalysis, and the history and sociology of psychiatric institutions. He has served as a consultant to the social studies curriculum committee of the Maxwell School at Syracuse University and to the Life Sciences Division of the Inter-University Communications Council from the National Library of Medicine in Washington, D.C. He is currently a member of the Board of Consultants of *The Psychoanalytic Review*. As a member of the Department of Psychiatry of the State University of New York, Upstate Medical Center at Syracuse, he serves as Director of the Adult Outpatient Psychiatric Services and as a Coordinator of Undergraduate Training in Psychiatry for the College of Medicine.

MELVIN G. DE CHAZEAU, Ph.D. (Harvard), Professor of Business Economics and Policy.

- Professor de Chazeau's primary interests and practical experience are in the fields of industrial organization and business-government relations. He has been concerned with policies in business regulation and antitrust matters, economic stabilization, and economic growth and has served as an economic consultant for industry groups, various federal governmental departments, and the Council of Economic Advisers. His writing has been mainly in the field of industrial organization, especially in the electric power, steel, and oil industries. He is an Associate Coordinator of the School's Executive Development Program.

ARCH T. DOTSON, Ph.D. (Harvard), Associate Professor of Government.

- Professor Dotson has long experience in problems of public administration and state and local government. For two years he served as Deputy Controller of the State of New York. More recently, as a consultant to the Ford Foundation,

he has played an active part in development planning in India, Iran, Japan, and the Philippines.

ALLAN R. DREBIN, M.B.A., Ph.D. (Michigan), C.P.A., Associate Professor of Accounting.

- Professor Drebin is primarily interested in the role of accounting information and its impact on economic decisions. He is the author of a monograph and several articles in this field and is currently engaged in research concerning the accounting treatment of research and development costs. He has served as a consultant to the Rand Corporation as well as to business firms and governmental agencies.

THOMAS R. DYCKMAN, Ph.D. (Michigan), Professor of Accounting and Quantitative Analysis.

- Accounting, statistics, and quantitative approaches to decision making are Professor Dyckman's fields of interest. His publications have dealt with such topics as automobile sales and installment credit, the investment decision, and the effects of alternative accounting techniques on management decisions. He is currently engaged in research on certain issues associated with decision making. He is a Faculty Leader in the School's Executive Development Program.

EDWARD S. FLASH, JR., Ph.D. (Cornell), Associate Professor of Public Administration.

- Professor Flash's teaching and research interests focus on urban affairs and federal administration, including work in such areas as science and public policy, regional development, and business-government relations. He has published a book on the Council of Economic Advisers. An experienced civil servant, he has served with the Navy Department, the District of Columbia Government, and the Commission on the Organization of the Executive Branch of the Government and has consulted with other federal agencies. He is currently Coordinator of Cornell's Career Education Awards Program, sponsored by the National Institute of Public Affairs. He will be on leave during the 1968-69 academic year.

FRANK F. GILMORE, S.M. (M.I.T.), Professor of Business Administration.

- The fields of executive development and business policy, both domestic and international, are the major concerns of Professor Gilmore. His work in these subjects is based on experience both as an executive and as a consultant in several firms. He is presently a consultant to the Mobil Oil Corporation on executive development. His recent research and writings have been in the area of corporate planning. He is the Director of the School's Executive Development Program.

JEROME E. HASS, M.B.A. (Pennsylvania), M.S. (Carnegie Inst. of Tech.), Lecturer in Managerial Economics and Finance.

- Microeconomic theory and applied mathematical economics are Mr. Hass's fields of interest. His publications have dealt with such topics as the measurement of technological change and the application of mathematical programming techniques to decentralized decision making. He is currently engaged in dissertation research directed toward a more general theory of intra-firm pricing for decentralized planning and control.

WARREN H. HAUSMAN, Ph.D. (M.I.T.), Assistant Professor of Production and Quantitative Analysis.

- Mr. Hausman's interests lie in the fields of production and operations management, managerial economics, and quantitative analysis. Formerly a consultant to the Rand Corporation, he has had experience both in management consulting and as an operations research specialist with General Foods Corporation. He is currently engaged in research concerning production scheduling under seasonal demand.

G. DAVID HUGHES, M.B.A., Ph.D. (Pennsylvania), Associate Professor of Marketing.

- Professor Hughes's interests encompass marketing, bargaining behavior, economic development, and quantitative approaches to measurement problems. He has written a number of articles on these subjects. His present work includes a text on measuring marketing opportunity, the public policy aspects of marketing structure and advertising, and the development of the transaction as the basic unit for economic analysis. He is a consultant to the travel and banking industries and to several European executive development programs.

JOHN G. B. HUTCHINS, Ph.D. (Harvard), Professor of Business History and Transportation.

- Professor Hutchins is primarily concerned with the fields of transportation, economic and business history, and business-government relations. He is currently engaged in research on problems and public policies relating to the maritime industries. He has written a book on American shipping and shipbuilding and numerous shorter pieces on this and other topics. He serves as Director of the Doctoral Program and Field Representative in the Graduate School. He is also a Director of Brown-Wales Company, a steel warehousing enterprise in Cambridge, Massachusetts. He will be on leave during the 1968-69 academic year.

CHRISTIAN T. L. JANSSEN, M.B.A. (Goteborg, Sweden), Lecturer in Managerial Economics.

- Mr. Janssen is interested in the application of quantitative techniques in the



Professor Nilsson.

areas of business policy formulation and decision making. He is currently engaged in the application of operations research methods to bank management.

FRANK A. JOHNSON, M.D. (Illinois), Visiting Professor of Administrative Medicine.

- Dr. Johnson is Coordinator of Graduate Training in the Department of Psychiatry at the State University of New York, College of Medicine in Syracuse. He has served as a lecturer and field psychiatrist for the Peace Corps and has been a consultant in hospital programming with the New York State Department of Mental Hygiene in Albany. He has written in the areas of mental hospital organization and psychiatric education. His current research interests include the theoretical and instrumental relationships that exist between psychiatry and the social sciences.

JAMES C. KINARD, M.B.A. (Texas), Lecturer in Accounting.

- Mr. Kinard's teaching interests lie in the fields of managerial accounting,

quantitative analysis, and finance. He is currently engaged in dissertation research in the areas of organizational information for decision making.

DAVID C. KNAPP, Ph.D. (Chicago), Professor of Administration.

- Professor Knapp, Dean of the College of Home Economics at Cornell, has held academic and administrative positions at several universities and has been a Fulbright Scholar in Finland and a Bullard Fellow at Harvard. His research and teaching interests are in the fields of public policy and higher education.

ROBERT W. LLEWELLYN, M.S.I.E. (Purdue), Visiting Professor of Industrial Engineering.

- Professor Llewellyn's teaching and publications have been in the fields of linear programming, inventory control, industrial dynamics, and production planning and control. He has also had industrial experience as an engineer. He is currently on leave from North Carolina State University and teaches industrial engineering at the Middle East Technical University in Ankara, Turkey, under the School's program there. He is Chief of Party of the Cornell Contract Team.

THOMAS M. LODAHL, Ph.D. (California at Berkeley), Associate Professor of Administration.

- A specialist in social-industrial psychology, Professor Lodahl has done research on leadership, group learning and problem solving, and the definition and measurement of job involvement. As an Associate of the National Training Laboratories, he has consulted with various organizations on problems of improving leadership and human-relations skills of members. He is currently working on research projects on personality and buying behavior and on organizational change. He has served as Editor of the *Administrative Science Quarterly*. He will be on leave during the 1968-69 academic year.

DUNCAN M. MACINTYRE, M.A., Ph.D. (Cornell), Professor of Industrial and Labor Relations.

- Professor MacIntyre's principal interests involve employee benefit plans and economic security problems and issues. He has authored a book on private health insurance and a monograph on relief and public assistance. Currently he is writing a monograph on the New York State "Medicaid" program. He has served as consultant to a number of legislative committees, national and state.

ALAN K. MCADAMS, M.B.A., Ph.D. (Stanford), Associate Professor of Managerial Economics.

- Professor McAdams's interests and publications are in the fields of managerial economics and business-government relations. During 1966 he was on leave, studying the impact of new technology on the steel industry of Western Europe. He has served as a consultant to industry and to the Ford Foundation. He is a Coordinator of the School's Executive Development Program.

DOUGLAS G. MONTGOMERY, D.S.Sc. (Syracuse), Visiting Assistant Professor of Urban Affairs.

- Professor Montgomery's interests include municipal finance, urban and regional economics, economics of higher education, budgeting for governmental units, and organization theory. His recent dissertation research involved a study of the influence of state expenditures on private higher education.

ARTHUR E. NILSSON, M.B.A., Ph.D. (Yale), Professor of Finance.

- Professor Nilson's primary interest is in the area of corporation finance. He has long been interested in the work of the Securities and Exchange Commission, in which, during its early years, he served as a head security analyst. He is a consultant on business financial problems and an Associate Coordinator of the School's Executive Development Program.

JOHN M. RATHMELL, M.B.A., Ph.D. (Pennsylvania), Professor of Marketing.

- Professor Rathmell is currently investigating the marketing of services, marketing the multinational firm, and the effects of divestiture on competition. He has written articles and monographs in various areas of the field and his text on managing the marketing function will be published in January, 1969.

RICHARD A. RETTIG, Ph.D. (M.I.T.), Assistant Professor of Public Administration.

- Professor Rettig's interests are in executive and legislative decision making for federal research and development programs especially related to resource allocation issues and in the process by which research and development programs are made responsive to national purposes. He has worked in the Bureau of the Budget, Executive Office of the President, and more recently as an assistant to the Chancellor of Higher Education of the State of New Jersey.

DONALD C. SAMSON, M.D. (Syracuse), Visiting Professor of Administrative Medicine.

- Dr. Samson, who teaches part-time in the Sloan Institute of Hospital Administration, is presently working on methods of programming medical instruction. He has written in the fields of cerebral metabolic disorders and on brain function. For several years he has conducted a family health care clinic for migrant agricultural laborers during the summer months. Dr. Samson is responsible for the medical clinic and the introductory course in clinical medicine at the State University of New York Upstate Medical Center in Syracuse.

RICHARD SCHRAMM, Ph.D. (Carnegie Inst. of Tech.), Assistant Professor of Economics and Finance.

- Professor Schramm's research and teaching interests are in the area of capital

theory and investment behavior. He has studied the determinants of manufacturing investment in the United States and France, focusing on the role of tax and monetary influences on investment behavior. He is currently studying the interrelationships between fixed and working capital management.

ROBERT W. SHIVELY, Ed.M. (Harvard), Lecturer in Administration.

- The areas of university administration and organizational change in the Latin American environment are Mr. Shively's particular interests. He served as the School's Director of Admissions and Student Affairs from 1963-67 and is currently Assistant Director of its Latin American Internship Program in Business and Public Affairs. During the 1966-67 academic year he was chairman of the R&D Committee of the Admission Test for Graduate Study in Business.

SEYMOUR SMIDT, Ph.D. (Chicago), Professor of Managerial Economics.

- Professor Smidt has engaged in studies in the fields of managerial economics, business conditions, and agricultural economics. He has written in the areas of economic development, capital budgeting, and commodity futures markets. He has served as a consultant to industry and as Chief of Party on the School's project at the Middle East Technical University in Ankara, Turkey.

WILLIAM H. STARBUCK, Ph.D. (Carnegie Inst. of Tech.), Professor of Administration.

- Professor Starbuck employs a wide range of methodologies—including mathematical models, computer simulation, laboratory experiments, and field investigation—in the study of individual decision making and behavior, bilateral bargaining, group problem solving, organizational structure, and other areas. He serves as Editor of the *Administrative Science Quarterly*, is a member of the Research Advisory Committee of the U.S. Air Force Personnel Research Laboratory, and is Vice Chairman of the College on Organizations of the Institute of Management Sciences.

DAVID A. THOMAS, M.B.A., Ph.D. (Michigan), C.P.A., Professor of Accounting.

- Professor Thomas is interested in cost accounting, accounting for the construction industry, industry cost structures, and philanthropy and is the author of several books, monographs, and articles on these subjects. He has worked in public accounting and industry, and he presently serves as the Administrator of the Charles E. Merrill Trust.

L. JOSEPH THOMAS, Ph.D. (Yale), Assistant Professor of Production and Quantitative Analysis.

- Mr. Thomas specializes in the field of operations research. His teaching interests include production and quantitative methods, particularly with respect to decision analysis. He has done research on models for price-quantity decisions

for new products. His research is oriented toward the building and analyzing of mathematical and computer models for business processes.

EDWARD H. VAN NESS, Ph.L. (College of St. Thomas), Visiting Professor of Health Planning.

- Mr. Van Ness is Executive Director of the New York State Health Planning Commission and Executive Secretary of the State Joint Council on Regional Medical Programs for Heart Disease, Cancer, Stroke and Related Diseases. He is co-editor of the book, *Concepts and Issues in Administrative Behavior*. For six years he was a member of the Governor's program policy staff responsible for health, mental health, and social welfare matters. He has been responsible for government executive development programs both at New York University and the University of Chicago.

PAUL P. VAN RIPER, Ph.D. (Chicago), Professor of Public Administration.

- Professor Van Riper's major interests are in American government, politics, and public administration, with special emphasis on general organization theory and management analysis, American and comparative public personnel management and executive development, military affairs, and political organization. He has written extensively on these topics and is currently engaged in a study of top-level decision making within the National Aeronautics and Space Administration.

RICHARD R. WEST, M.B.A., Ph.D. (Chicago), Associate Professor of Finance.

- Professor West is particularly concerned with the organization and functioning of money and capital markets. His current research involves studying the effects of differences in underwriting competition on the interest cost of municipal bonds. He has published several articles on other aspects of the municipal bond market. Prior to coming to Cornell he was a Resident Fellow with the Federal Reserve System.

RODNEY F. WHITE, M.Comm., Ph.D. (Chicago), Associate Professor of Administration.

- Professor White's research interests are in the fields of organizational behavior and the health professions. He is currently working with others on research into the backgrounds and roles of hospital administrators and is conducting a comparative study of health administration in three countries. He is an Associate Editor of the *Administrative Science Quarterly* and serves as a Seminar Chairman in the Health Administrators Development Program.

T. NEVILLE YOUNG, B.Comm. (Melbourne), Visiting Associate Professor of Accounting.

- Professor Young is primarily concerned with the use of accounting informa-

tion for managerial decisions. His interests also embrace the fields of accounting theory, taxation law and accounting, and the extent to which the accounting data of business corporations should be made public. He is on leave from Monash University, Clayton, Victoria, Australia, where he is a Senior Lecturer in the Faculty of Economics and Politics.

Emeritus Professors

DONALD ENGLISH, M.B.A., Professor of Accounting, Emeritus.

ALBERT M. HILLHOUSE, J.D., Ph.D., Professor of Public Finance, Emeritus.

Research Associates

JOAN S. DODGE, Ph.D., Research Associate in Hospital Administration.

MIRIAM T. DOLSON, Ph.D., Research Associate in Hospital Administration.

Administrative Staff

EDLA L. BEALD, B.S., Registrar and Administrative Aide to the Dean.

INEZ M. KING, Administrative Aide to the Dean.

JILL GARFUNKEL, A.B., Administrative Aide.

BETSY ANN OLIVE, B.L.S., Librarian.

JOAN WIRTH, M.L.S., Assistant Librarian.

SUSANNE B. HENDSEY, M.L.S., Assistant Librarian.

LILLIAN B. PARKE, Head, Library Circulation and Reserve.

Advisory Council to the School

NELSON SCHAELEN, Former President and Chairman of the Executive Committee, Smith, Barney & Co., Inc. (*Chairman of the Council*).

ROBERT O. BASS, Group Vice President, Borg-Wagner Corporation.

W. MICHAEL BLUMENTHAL, President, Bendix International.

HERMAN F. BORNEMAN, Managing Partner of Exchequer Associates and President of Borneman, Martin Co., Inc.

HAROLD BRAYMAN, former Director of Public Relations, E. I. du Pont de Nemours & Company, Inc.

FLETCHER L. BYROM, President, Koppers Company, Inc.

JOSEPH L. EASTWICK, former Chairman of the Board, James Lees and Sons.

GLENN W. FERGUSON, U. S. Ambassador to Kenya.

ROGER W. JONES, Special Assistant to the Director, Bureau of the Budget, Executive Office of the President.

WILLIAM G. KIRKLAND, Partner, Kidder, Peabody & Co.

GEORGE G. RAYMOND, Jr., President, Raymond Corporation.

DUDLEY N. SCHOALES, Partner, Morgan, Stanley & Co.

RICHARD A. STROUCE, Partner, McKinsey & Company.

GUIDO F. VERBECK, Jr., Senior Vice President, Morgan Guaranty Trust Company.

THOMAS WAAGE, Vice President, Federal Reserve Bank of New York.

GILBERT H. WEHMANN, Partner, White, Weld & Co.

FRANKLIN R. WINNERT, Vice President, Owens-Corning Fiberglas Corporation.

ARTHUR S. WOLCOTT, President, Seneca Foods Corporation.

The School and the University

In its creation and development the Graduate School of Business and Public Administration has drawn support from and in turn has reflected the century-long traditions of Cornell University. From its very founding Cornell University broke from the then dominant emphasis on the classics and provided educational programs more closely related to the growth of American life and society. In the same spirit Cornell took the lead in welcoming students from overseas.

The pursuit of this broad purpose has made Cornell—a private institution but also the land-grant university of New York—a university of fifteen major schools and colleges, of which four are supported by the State of New York. Coeducational and nonsectarian, it has a student body of approximately 13,000, a faculty of over 2,000, and a library of over 3,000,000 volumes. It is within this framework that the School has set its goals and fashioned its programs.

Like the University of which it is a part, the School draws its student body from a wide variety of disciplines and cultural environments. The 260 Master's degree candidates currently in residence come from approximately 100 American and foreign colleges and universities. Of these, about 220 are studying for the Master of Business Administration (M.B.A.) degree and 40 for the Master of Public Administration

(M.P.A.) degree. More than half of the students have a background of undergraduate studies in arts or sciences, while approximately one-quarter were engineering students as undergraduates. Three-quarters began their graduate training immediately after receiving their Bachelors' degrees and the remaining quarter following military or work experience.

Because of the diverse backgrounds of the School's students and the need for a common understanding of the environment and functions of management, much of the first-year program for each of the School's professional degrees is predetermined. Once this basis for further studies is acquired, the student, with the approval of his adviser, may choose from a wide range of course offerings in building a purposeful program or "concentration" fitted to his needs and aspirations. Reflecting the multidisciplinary nature of the executive function, second-year programs are flexible and broad in scope and embrace not only the offerings of the School but also those of other parts of the University.

The programs of the School are not confined to studies for the professional Masters' degrees. Work for the degree of Doctor of Philosophy (Ph.D.) is also offered. In addition, the School conducts several development programs for experienced executives and sponsors a number of research activities. Further, the School's interest in advancing the art and science of administration is expressed in the *Administrative Science Quarterly* and other publications. These programs and publications are described in greater detail in subsequent sections of this Announcement.

The School admitted its first students in 1946. It became an independent graduate school at Cornell in 1955, and its doctoral program was started that year. The Sloan Institute of Hospital Administration was also established as an integral part of the School in 1955.

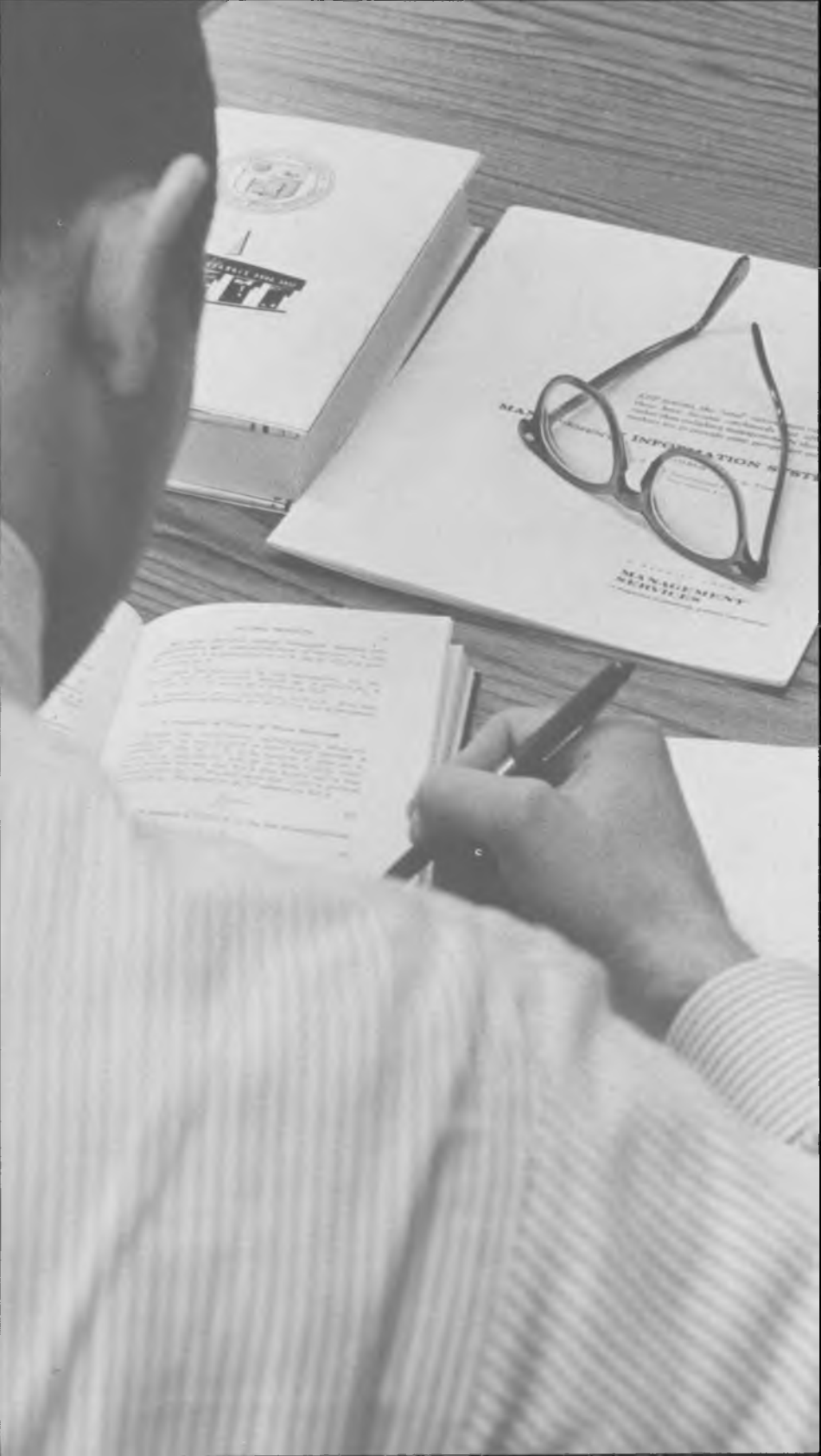
The School is housed in Malott Hall, which was completed during the spring of 1964. This building was designed to meet the specialized requirements of graduate education in administration. It houses the Eastwick Library, a center for student activities, faculty and administrative offices, and lecture, seminar, and case-discussion rooms.

Education for Management

Today's executive in business, government, or hospital and medical care administration must have competence in many disciplines in order to understand both the complexities of the external environment in which he operates and the internal workings of the organization of

which he is a part. The continued development of science and technology, the rapid growth of our population, and the ever-changing nature of the international environment are among the factors which are significantly altering the scope and character of management decision making and imposing new responsibilities upon administrators at all levels. New developments in quantitative analysis are accompanied by a revolution in information processing, made possible by high-speed computers. On another front, rapid advances in the behavioral sciences are suggesting new approaches for management to employ in organizing human effort and in arriving at policy decisions.

While the knowledge and analytical ability which a successful executive must possess will be developed in part from the constant challenge and stimulation of experience, education in business or public administration can establish a sound basis for acquiring such knowledge and analytical ability. Graduate education for management can also help crystallize career objectives and improve mobility and discretion in the choice of employment. In the last analysis success will be determined by the student's own efforts to develop his abilities and potentialities. Graduate study in business and public administration will expand his opportunities. The realization of those opportunities rests with the student.



II. MASTER'S DEGREE PROGRAMS

Approach and Content

The School's program for the Master of Business Administration or the Master of Public Administration degree requires two years of study and the completion of 60 credit hours of course work. Much of the first year is taken up with core courses which introduce the student to the broad range of disciplines relevant to administration and provide him with the necessary background for more specialized studies. By contrast, the second year is devoted almost entirely to elective courses chosen by the student, in consultation with his adviser, to meet his own particular career interests and objectives.

Flexibility. Contributing to a high degree of flexibility in the Master's degree programs of this School are: (1) the possibility of being exempted from core courses in areas in which the student possesses an adequate background upon entering the School, (2) the availability of a wide range of elective courses in the School's curriculum, and (3) the opportunity for the student enrolled in the School to take a portion of his studies in other colleges and schools of Cornell University.

A student with a strong undergraduate background in one or more of the subjects included in the core curriculum may be exempted from a core course requirement on the basis of successful completion of an examination in the subject matter covered by the course. Exemption examinations are administered immediately prior to fall term registration. The student who passes an exemption examination does not thereby receive credit toward his degree, but the number of elective courses which he may take is increased and he is able to move more quickly into work in his special areas of interest.

The student is asked to choose his elective course with the guidance of his faculty adviser and with some purposeful pattern in view. Although no "major" is formally required, a wide range of fields of concentration have been identified and are described in the pages below.

In working out his elective course program, the student is often encouraged to enroll in courses offered in other divisions of the Uni-

versity as well as in those offered by the School itself. Of particular interest to students in the fields of business and public administration are the graduate course offerings of the Departments of Economics and Government of the College of Arts and Sciences; the Department of Industrial Engineering and Operations Research of the College of Engineering; the Department of City and Regional Planning of the College of Architecture, Art, and Planning; the College of Agriculture; and the School of Industrial and Labor Relations.

Method of Instruction. Teaching methods vary with the subject matter and with the preferences of the instructors. The case method, the lecture-discussion approach, and the seminar method are all extensively employed. Cases are introduced in an effort to acquaint the student with the complexities of real management situations requiring analysis, decision, and the development of a course of action. The lecture-discussion approach is employed in areas in which it can contribute to the effective integration of reading assignments and class materials. Most advanced courses are offered as seminars, in which individual study and research are required and ideas can be exchanged at length.

Honors. During the second year, high-ranking students are encouraged to participate in an honors program. The successful completion of this program is recognized by the conferring of the Master's degree "with Distinction." Outstanding performance in the regular course program of the School is recognized at the end of each term by the publication of a Dean's List.

Business Administration

The School's program in business administration is designed to provide an educational foundation for responsible business leadership. Organizational behavior and administrative relationships are examined with the aid of contributions from the behavioral sciences. The uses and limitations of quantitative approaches to managerial problems are explored. A foundation in economic analysis is presented in order to equip the student with analytical tools of proven value in decision making and to provide him with a better understanding of the environment in which business operates. The functions of marketing, operations management, and finance are investigated, and an effort is made to instill in the student an appreciation of the interrelationships of these functions and an understanding of the company-wide planning process.

The political and economic foundations of the United States business community and the nature and impact of important public policies are also explored.

The Core Program in Business Administration

A large portion of the first year of study for the M.B.A. is devoted to completing a series of core courses in organizational theory and behavior, managerial accounting, quantitative methods (including computer programming), economic analysis for management, analysis of environmental issues, and the functional areas of marketing and finance. Operations management may be elected during the spring semester of the first year by those students with special interest in the field. If not taken during the spring semester of the first year, operations management must be taken during the fall semester of the second year. The structure of the first-year curriculum is indicated on the chart below. Detailed descriptions of core courses are presented in the following section on pages 33–37.

FIRST-YEAR BUSINESS ADMINISTRATION PROGRAM

Fall Semester	Spring Semester
120. Organization Theory and Behavior	126. Marketing
122. Managerial Accounting	128. Finance
123. Quantitative Methods for Management I	129A. Quantitative Methods for Management II
124. Economic Analysis for Management I	125. Economics Analysis for Management II
129. Issues in the Environment	Elective Course

Course 200, Business Policy, and Course 127, Operations Management, if not elected during the first year, are required for M.B.A. candidates in the first term of the second year. In addition, students are asked to complete at least one course dealing with business-government relations during the second year. (For a list of courses which fulfill this requirement, see page 35 below.)

Work Beyond the Core

During his first year the M.B.A. candidate may enroll in at least one elective course. With the exception of the three requirements noted just above, his second-year program may be made up of courses selected

according to his particular career focus and needs. To assist the student in developing a purposeful pattern of courses for his work beyond the core program, the following fields of concentration have been defined:

Industrial Accounting. This concentration is designed to lead to careers in business or governmental accounting and in financial or general management. Its requirements are flexible and depend on the student's preparation prior to entering the School and on his vocational objectives. A typical program in this field includes second-year courses in finance, managerial economics, and computer applications as well as in intermediate, advanced, cost, and tax accounting.

Professional Accounting. This concentration, which is designed to prepare the student for a career in public accounting, meets the academic requirements for the Certified Public Accountant certificate in New York State. The regulations of the New York State Education Department specify that the C.P.A. candidate must be a graduate of an educational institution offering an accounting curriculum registered by that Department. He must have completed the following minimum semester credit-hour requirements in his academic program: 60 in liberal arts and sciences, 24 in accounting, 9 in economic analysis, 9 in finance, 4 in business law, and at least 14 other business electives. These requirements may be met by combining undergraduate course credits with those received in this School. A student who plans to fulfill the academic requirements for the New York C.P.A. certificate must take the following courses: 300, Intermediate Accounting; 301, Advanced Accounting; 302, Cost Accounting; 303, Seminar in Financial Policy and Managerial Accounting; 305, Federal Taxation and Decision Making; 308, Law of Business Associations; and 309, Advanced Business Law. He must also take Hotel Accounting 183, Auditing, which is offered by the School of Hotel Administration. He should also elect Courses 304, Seminar in Financial Accounting, and 901, Data Processing Systems. For the student who has no prior work in accounting and who elects to take the C.P.A. concentration, one core course may be omitted and 305, Federal Taxation and Decision Making, may be used to meet the business-government relations course requirement. The core course to be omitted must be approved by the Academic Standards Committee. Because careful scheduling is necessary if C.P.A. course requirements are to be met, students contemplating the C.P.A. program are strongly urged to consult with a member of the accounting staff at the outset of their work in the School. (Note: For students with high academic

records, six-week internships in public accounting firms may be arranged during the second year of study.)

Finance. This concentration is designed to provide a thorough understanding of the role of finance in administrative and decision-making processes and to familiarize the student, in some depth, with the mechanisms and operations of the financial system and the intricate interrelationships between business and government in the realm of finance. The program in business finance presents an integrated treatment of the operational aspects of business and investment finance, the functions of financial institutions and capital markets, and the basic economic and legal framework of financial organizations. This concentration meets the needs of students who look forward to specialized careers in the financial management of business and to careers in commercial, savings, and investment banking, in financial counseling, and in investment management.

International Business Operations. Students interested in careers in international business operations may develop a field of concentration based on courses offered in this School and elsewhere in the University. For information on courses in this concentration see page 45. In addition, the School offers a number of courses in the International Development concentration which are relevant for students planning to work abroad, especially in the developing areas (see page 45). Supplemental course work can be taken in the Department of Government, and the Department of Agricultural Economics. For students with well-defined geographic interests, language and area studies offerings are also available.

Managerial Economics. This concentration is designed for students seeking careers either in general management or as professional economists in industry or in government. The rapidly expanding application of economic analysis in decision making is creating wider opportunities for men trained in its use both in line management posts and in staff positions in large industrial corporations, banks, insurance companies, investment firms, merchandising operations, and many departments of the federal and state governments. The student who elects this concentration should have had some previous training in economic studies, especially economic theory, and should possess some background in mathematics. His program in the managerial economics concentration may emphasize either a qualitative or a rigorously quantitative approach, but a basic understanding of both is needed and must be demonstrated.

Thus the student is expected to develop a firm grasp of the economic and institutional framework of business behavior and of government policies that condition business performance. He is also required to develop competence in the use of basic mathematical and statistical tools. In carrying out his program the student may focus in depth on the analysis of problems associated with the functions of finance, marketing, or business management, or he may elect to concentrate on the more general issues of government operations and public policy. In either case, with the consent of his adviser, the student may call upon the varied resources of the University to complement and supplement course offerings in this School.

Marketing. This concentration provides the student with an understanding of the operational and policy aspects of the marketing function. The role of marketing in identifying and developing demand for products and services and in facilitating the orderly movement of goods through the productive stages to consumers is examined in detail. The dynamics of demand, channels of distribution, competitive behavior, sales forecasting, advertising strategy, marketing measurement, and pricing and product development policies are among the subjects emphasized. The analytical tools of economics, psychology, sociology, and operations research are applied in this field, and the increasingly multinational character of marketing is recognized. Elective courses are built around both the process of decision making in a marketing setting and the supporting staff activities, particularly marketing research.

Personnel Management. The objectives of this concentration are the following: to develop an understanding of personnel administration as a management function and of its relationship to other management activities; to familiarize the student with the policies, methods, and techniques utilized in the process of personnel administration; to develop the capacity to analyze personnel problems, select the most effective means of dealing with them, and plan appropriate courses of action; and to explore current trends and research in the field of personnel administration and human relations. Courses and seminars in this field deal with such topics as motivation, supervision, communications, selection, training, compensation, discipline, performance review, promotion, transfer, development, safety, and employee services and benefits. In addition to the courses and seminars in personnel management and human relations offered by this School, students interested in this field may also take advantage of a wide range of graduate courses related to personnel

management in other divisions of the University. Of particular note are the graduate course offerings of the School of Industrial and Labor Relations in collective bargaining, labor union history and administration, industrial training, labor market economics, industrial psychology, selection and placement, social security, wage and salary administration, job analysis, and human relations.

Production and Operations Management. This concentration is designed to provide a thorough comprehension of the major economic problems of production and operations management, together with the analytical techniques most effective in their solution. Courses in this field deal with such topics as process and equipment selection, product planning, aggregate production and work-force scheduling, production and inventory control, distribution systems, project control, job-shop scheduling, and quality control. Students develop an understanding of the effectiveness and the limitations of analytical techniques such as linear programming, classical methods of optimization, dynamic programming, computer simulation, critical path methods, heuristic programming, and statistical analysis. Students interested in this field are encouraged also to take coursework in the closely related areas of managerial economics and quantitative analysis.

Quantitative Analysis for Managerial Decision Making. This concentration is designed to develop skill in the use of mathematics and statistics for solving managerial problems. Work in this field is offered by the School in cooperation with the Department of Industrial Engineering and Operations Research of the College of Engineering, and several courses are given jointly by that Department and the School. Students electing this concentration may develop programs, with the assistance of their advisers, which include courses drawn from the School's offerings in operations research, computer applications to business, and managerial economics. They may also elect courses in other departments of the University, including the Departments of Mathematics and Economics in the College of Arts and Sciences and the Department of Industrial Engineering and Operations Research in the College of Engineering. The facilities of the Computing Center are available for the use of students both in coursework and in approved research projects.

Transportation. For students interested in careers in transportation, courses are offered, normally for second-year students, in the special features of transportation activities. With respect to railroads, motor

carriers, airlines, and shipping firms, emphasis is placed on the features of pricing, service, operations, organization, finance, and public policy peculiar to each. Students electing this field take advanced work in supporting business subjects and in the field of public regulation of industry.

Special Programs. In addition to the fields of concentration noted above, special concentrations may be developed to meet a student's needs in other aspects of business administration, such as *Agricultural Management* and *Organizational Theory and Behavior*.

Public Administration

The rapid evolution of the role of government over the course of the last three decades has added immeasurably to the dimensions of public administration and to the career opportunities available in that field. An expanded and strengthened career public service is contending with a host of new and difficult domestic and international challenges. The M.P.A. curriculum is intended for students who aspire to careers in government at the federal, state, local, or international level. It is designed to prepare individuals for careers in administration and policy formulation in program areas as diverse as urban affairs and overseas economic development or in staff functions in such areas as finance, budget analysis, or personnel management. It also provides a basis for work with private enterprise in the management of its relations with government, or with government in its relations with business.

Education for a career in public affairs should provide the student with an awareness of the political processes of representative government and an appreciation of the decision-making and managerial processes of public agencies. It should also equip him with an understanding of the broad spectrum of public policy issues and a thorough knowledge of the intricacies of at least one major public policy area. Finally, it should develop in the student the analytical ability which is essential to successful policy formulation and execution. These are the objectives of the graduate program in public administration at Cornell.

The Core Program in Public Administration

A large portion of the first year of study for the M.P.A. is devoted to completing a series of core courses in organizational theory and behavior, managerial accounting, quantitative methods (including computer pro-

gramming), economic analysis for management, analysis of environmental issues, and management of public agencies. The structure of the first-year curriculum is indicated on the chart below, and detailed descriptions of the core courses are presented in the following chapter on pages 33–35 and 37–38. These core courses introduce the student to the several disciplines relevant to the practice of public administration and provide him with the basis for advanced work in his particular field or fields of interest.

In the second year all candidates for the public administration degree will take Course 131, Management of Public Agencies II, and participate in Course 555, Issues of Public Policy and Administration, in which the similar and dissimilar elements present in a wide range of public policy issues are explored. Like candidates for the degree in business administration, students in the public administration program are asked to complete at least one course concerning questions of business-government relations. (For a list of the courses which fulfill this requirement, see page 35 below.)

FIRST-YEAR PUBLIC ADMINISTRATION PROGRAM

Fall Semester	Spring Semester
120. Organization Theory and Behavior	Elective
122. Managerial Accounting	Elective
123. Quantitative Methods for Management I	123A. Quantitative Methods for Management II
124. Economic Analysis for Management I	125. Economic Analysis for Management II
129. Issues in the Environment	130. Management of Public Agencies I

Work Beyond the Core

During his first year the M.P.A. candidate may enroll in at least two elective courses in his special field or fields of interest, and during his second year, with the exception of the three requirements noted just above, his entire program may be made up of courses selected according to his particular career focus and needs. In addition to the courses offered by this School in public administration, public policy, and related fields, the student's elective program often involves work in the foreign area study programs, the Department of City and Regional Planning of the College of Architecture, Art, and Planning; the School of Industrial and

Labor Relations; or in various departments of the College of Arts and Sciences.

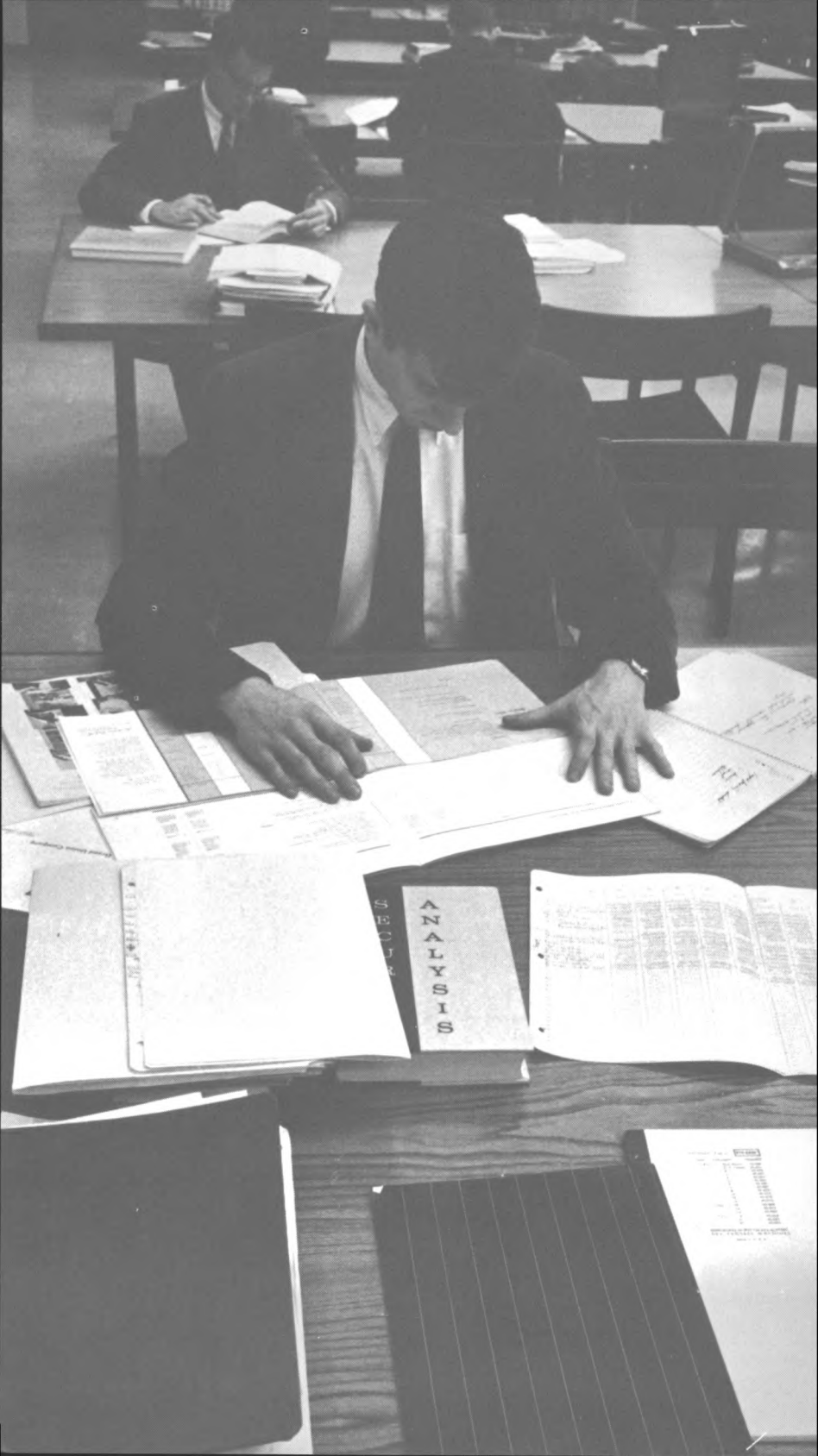
As a supplement to their academic work, public administration students are strongly urged to obtain employment in public agencies during the summer between the two years of the M.P.A. program. Whenever possible, the School's staff assists the student in finding a summer position which relates closely to his career plans. The experience provided by such employment has been found most helpful in contributing to a thorough understanding of the nature of governmental operations. in developing a focus for the student's second-year program, and in guiding his career choice.

To assist the student in developing a purposeful pattern of courses for his work beyond the core program, the following fields of concentration have been defined:

Economic Analysis and Public Policy. This concentration prepares students for careers on the economic staffs of federal, state, or local governmental agencies. Varying emphases are possible in this field. A student may focus his attention on monetary and fiscal policies and their roles in contributing to high levels of employment, price stability, economic growth, and a satisfactory balance-of-payments picture. Alternatively, he may specialize in problems in the public regulation of business enterprise or in the field of economic planning at the national or community level. Students electing this concentration often take some of their work in the Department of Economics in the College of Arts and Sciences, and they may also enroll in courses offered in other parts of the University.

General Public Administration and Policy Formulation. This concentration recognizes the continuing need for broad-gauged administrators who are characterized not by a high degree of specialization in a single field but rather by a comprehensive understanding of the nature of governmental operations. In this concentration work in organizational theory, management analysis, policy formulation, and decision theory is emphasized. This concentration prepares the student for work in general administration or in budget or organization and methods (O&M) analysis.

International Development. Designed for students interested in careers with international agencies and governmental activities abroad, this concentration is built on a wide range of international courses through-



out the University, including offerings of this School. In addition to the School's courses in the theory of the developmental process, development administration, contemporary nationalism, and American operations abroad, work may be taken in international economics, agricultural economics, rural sociology, anthropology, and government. Credit may be given for advanced work in language, and students interested in public service abroad are urged to develop a fluent knowledge of one foreign language.

Cornell University's interest in the field of international development is reflected in several campus programs and overseas commitments. Cornell's Center for International Studies administers a substantial Ford Foundation grant for the support of international studies, brings distinguished visitors to the campus throughout the year, and arranges frequent seminars and discussions on international affairs. The University offers programs in Southeast Asian, South Asian, Chinese, and Latin American studies, and National Defense Education Centers have been established in support of these area programs. Work is also offered in African and Soviet studies, and there are special programs in International Population and International Agricultural Development. The University administers several government contracts and foundation grants involving the development of research and teaching institutions overseas. (Students interested in this field should consult pages 45-48 and 90 below and make reference to the discussion of International Business Operations on page 21.)

Metropolitan and Urban Affairs. The emergence of large urban and metropolitan areas as the dominant environmental pattern in the United States has posed urgent challenges for public administrators at all levels of government. This concentration is concerned with challenges as broadly varying as civil rights, mass transportation, and health care. It is also concerned with the new tools and approaches which are being developed to contend with urban issues. Students in this field select their advanced courses not only from the offerings of this School but also from courses presented in the Department of City and Regional Planning and in other parts of the University. This concentration prepares students for work in urban planning and policy staffs, urban renewal operations, city management, or state and federal agencies concerned with urban problems.

Organizational Theory and Behavior. In this concentration the student focuses his attention on the theory of bureaucratic organization, the application of the behavioral sciences to the field of public administra-

tion, and the interrelationships of politics and administration. Students interested in careers in government, politics, or research and consulting will find highly relevant new theoretical concepts and analytical approaches in this concentration. Group dynamics, group problem solving, and the different methods of employee accommodation to large-scale organizations are but three of the many areas studied in which empirical research has enriched the literature of management.

Special Programs. In addition to the fields of concentration noted above, special concentrations may be developed to meet a student's needs in other aspects of public administration or public affairs. For example, a concentration may be arranged in *National Security Administration*, which includes work in civil-military relations, coordination of defense and foreign policy, coordination of the separate military services and functions, and the interdependence of national security and domestic policy. Special concentrations may also be developed in *Science, Technology, and Public Policy* and in other fields as well.

Hospital and Medical Care Administration

Great changes are taking place in systems and facilities for the provision of medical care in the United States. These changes are accompanied by a manpower shortage in many health fields, and there are challenging careers ahead for men and women entering the fields of hospital and medical care administration.

With the aid of a substantial grant from the Alfred P. Sloan Foundation, the Sloan Institute of Hospital Administration was established as an integral part of the Graduate School of Business and Public Administration in 1955. Since that time a two-year Master's degree program has been offered for students interested in careers in hospital administration or in the field of medical care administration. Students may enter this program as candidates for either the M.B.A. or the M.P.A. degree.

The first academic year, which is illustrated in the chart below, includes those core courses which are common to both the M.B.A. and the M.P.A. program. In addition, health administration students take an introductory course in hospital and medical care organization and in clinical medicine and public health concepts. Health administration students who are candidates for the M.B.A. are required to take the core courses in finance and business policy but not in operations management or marketing. Candidates for the M.P.A. are required to take

the course in issues of public policy and administration, which is required of all M.P.A. candidates, but not the two-term sequence in management of public agencies. All health administration students are required to complete at least one course concerning questions of business-government relations. For health administration students, Course 458, Health and Welfare Policy: Foundations and Strategies, meets this requirement.

FIRST-YEAR HOSPITAL ADMINISTRATION PROGRAM

Fall Semester	Spring Semester
120. Organization Theory and Behavior	Elective
122. Managerial Accounting	140. Introduction to Hospital and Medical Care Organization
123. Quantitative Methods for Management I	123A. Quantitative Methods for Management II
124. Economic Analysis for Management I	125. Economic Analysis for Management II
129. Issues in the Environment	141. Introduction to Clinical Medicine and Public Health

In addition to the introductory core courses for students in this program, a substantial range of additional courses relating to hospital and health services administration is available in the School. Subjects covered by these courses include health economics, managerial accounting in hospitals, developments in hospital and medical care administration, legal aspects of hospitals administration, policy and planning in hospitals and health agencies, mental health and administration, and health and society. At least one of the elective courses of the first year and much of the student's second-year program will be devoted to these courses.

A new concentration leading to careers in comprehensive health planning is being instituted in 1968-69. In addition to the core requirements listed on page 38, students taking this new concentration must also meet additional flexible core requirements consisting of the election of one course from approved lists of courses in each of six content areas. These areas are: demography-ecology, social organization and change, political processes, planning processes, mental and environmental health, and community health planning.

The summer between the two academic years is devoted to an administrative residency. With the cooperation of the New York Hospital—Cornell Medical Center, residencies are arranged in selected hos-

pitals in the New York City area where the student can gain experience under the guidance of particularly well qualified administrators. In order to provide further direct contact with the nature of hospital operations, frequent field trips are made both to nearby affiliated hospitals and to major medical centers.

Note: A special brochure entitled *Graduate Study in Hospital and Medical Care Administration at Cornell* may be obtained by writing to the Sloan Institute of Hospital Administration, Graduate School of Business and Public Administration, Malott Hall, Ithaca, New York 14850.

Law and Administration

The School offers a combined program with the Cornell Law School in legal and administrative studies, in which the student may obtain the Master's degree, in either Business or Public Administration, and the J.D. degree in four years instead of the five which would be required if each were taken separately. This combination is of interest to students preparing for careers in such areas as tax accounting, corporation law, or legal practice in government.

Normally, the first year's work is taken entirely within the Graduate School of Business and Public Administration and the second entirely within the Law School. In the third year the work is divided between the two schools, and in the fourth year it is taken entirely within the Law School. The student completes the requirements for the Master's degree at the end of the third year and the requirements for the law degree at the end of the fourth.

A student, to be admitted to the full combined program, must meet the admissions requirements of both schools. He should apply for admission to both schools and be accepted by their respective admissions committees prior to entrance into the first year of the program. A student who decides to apply for the program after starting his residence in the Graduate School of Business and Public Administration should discuss his plans with both schools as soon as possible. No assurance can be given, however, that such a student will be permitted to undertake the combined program.



III. THE CURRICULUM

In the following pages the courses offered by the School are listed and described. Core courses are listed first. Elective courses are then presented under the following headings: accounting and business law, finance, hospital and medical care administration, international business and development, managerial economics and economic policy, marketing, organizational behavior and personnel, production and operations management, public policy and public administration, quantitative analysis, transportation, miscellaneous, research, and service courses.

Only those courses which are offered by the Graduate School of Business and Public Administration are described here. The student should note, however, that there are many course offerings in other portions of the University—including the Departments of Economics, Government, Psychology, and Sociology in the College of Arts and Sciences, the School of Industrial and Labor Relations, the Department of Industrial Engineering and Operations Research in the College of Engineering, and the Department of Agricultural Economics in the College of Agriculture—which may be of interest to him. For information on the nature and content of these courses, the student should consult the Announcements of these other schools and colleges of Cornell.

The Core Program

For All Students

120. ORGANIZATION THEORY AND BEHAVIOR. First term. Credit three hours. Messrs. White and Shively.

Theories and empirical research on human behavior in business, public, and medical care organizations are studied, and their management applications are explored. Problems of internal structure are examined, such as specialization and division of labor, hierarchy and authority, informal organization, and structural variations in organization. Dynamics of organizational behavior are also treated under such topics as leadership and supervision, motivation and the social structure of work groups, and communication and control processes. The course is presented through readings and through discussion of theory and empirical research.

122. MANAGERIAL ACCOUNTING. First term. Credit four hours. Messrs. David A. Thomas and Drebin.

In the first part of this course the principles and procedures underlying financial statements are introduced. Financial transactions are studied and alternative accounting treatments are analyzed for the recording of sales, purchases, depreciation of long-lived assets, inventory, stockholders' equity, and bonds. Tools for analysis of financial statements and the uses and limitations of ratios and other quantitative measures are introduced. The second part of the course concentrates on accounting information useful for managerial action. The subjects covered include classification of costs; manufacturing overhead analysis; job order, process, and standard cost systems; variance analysis; budgeting; variable (direct) costing; cost control reports; an intensive review of compound interest (time discounting of money); capital budgeting; and measuring performance. The objectives are to build skill in preparing accounting information, to develop an ability to recognize the uses and limitations of the accounting information available to management, and to apply the information in decision situations.

123. QUANTITATIVE METHODS FOR MANAGEMENT I. First term. Credit three hours. Messrs. Dyckman and L. Joseph Thomas.

This course is designed to introduce the student to the basic mathematical and statistical methods that are becoming increasingly useful to the manager. The mathematical topics covered in the first semester are elementary functional relationships, differential and integral calculus, and an introduction to probability theory. In addition, because of the widespread use of computers as a management tool, it is desirable that all students of administration develop some competence in using the computer. As a step in this direction, this course also covers a simplified programming language.

123A. QUANTITATIVE METHODS FOR MANAGEMENT II. Second term. Credit three hours. Mr. Dyckman.

This course is oriented toward decision making, stressing the Bayesian approach. Emphasis throughout is placed on the logic of the various quantitative approaches and on their integration and application to management problems.

Note: In order to fulfill the core requirement for quantitative methods for management, students may substitute Course 600, Introduction to Probability Theory, for Course 123, and Course 601, Introduction to Statistical Theory, for Course 123A. These courses are described below under the "Quantitative Analysis" heading.

124. ECONOMIC ANALYSIS FOR MANAGEMENT I. First term. Credit three hours. Messrs. Schramm and Hass.

This course investigates the structure and operation of the American economic

system. Attention is given to the role of market structures and the price system in the allocation of resources, but the primary focus is on the determination of national income and employment, the maintenance of high levels of economic activity, and the stimulation of economic growth without inflation. Monetary and fiscal policies are studied with particular reference to their institutional settings, their impact on the business community, and the limitations imposed by considerations of the balance of payments. Throughout the course emphasis is placed on the effects of economic and public policy changes on the business firm and the ways in which businessmen may adapt to such changes.

125. ECONOMIC ANALYSIS FOR MANAGEMENT II. Second term. Credit three hours. Messrs. McAdams and Hausman.

The purpose of this course is to explore the ways in which the economic analysis of data, internal and external to the firm, may improve management decision making. Economic problems associated with the formulation and administration of business policies are explored. Attention is given to the effects of price and income changes on product demand and factor supply, the use of forecasts, the study of price and product policies in imperfect market structures under conditions of uncertainty and risk, and the direction of capital investments. Opportunity cost and incremental analytical techniques are employed to help identify relevant costs for various decisions. Attention is given to both quantitative and qualitative tools of analysis. Case analyses provide a basis for applying the concepts encountered to specific business problems.

129. ISSUES IN THE ENVIRONMENT. First term. Credit three hours. Messrs. McAdams, Bent, Brown, and Hass.

In this course, students are confronted with one or more significant on-going problems from the complex environment in which today's organizations must function. Problems such as the impact of computers on the human, social, and economic performance of particular organizations, the business, public, and health care implications of low cost housing projects in a nearby city or cities, and the significance of implications for a geographic region of a nuclear power installation are illustrative of subject topics. The student must identify the major problems, analyze their significance, recommend solutions, and in particular cases, participate in their implementation. This year, the Cornell Land Use Game is employed to permit students to simulate and analyze the dynamic decision process that leads to urban and regional developments including the development of ghettos. Frequent written and oral reports on specific topics are used as a means of focusing the efforts of each student and simultaneously providing needed experience in communication skills.

Note: In addition to the seven courses listed above, all students—regardless of their degree candidacy—will be required to complete at least one course concerning questions of public policy and business-government

relations. This list from which such a course may be selected includes: 202, Business Enterprise and Public Policy, and 550, Politics and Political Power, both of which are described in the section on "Public Policy and Public Administration" below; 555, Issues of Public Policy and Administration, described under the core requirements "For M.P.A. Candidates"; 376, Business Policy and Economic Instability, and 377, Competitive Behavior and Public Policy, described below under "Managerial Economics and Economic Policy"; 575, Transportation: Rates and Regulation, described below under the "Transportation" heading; and 458, Health and Welfare Policy: Foundations and Strategies, listed under "Hospital and Medical Care Administration" below.

For M.B.A. Candidates

126. MARKETING. Second term. Credit three hours. Mr. Hughes.

This introductory course is designed to acquaint the student with the perspectives and problems of the marketing manager and the role of marketing in the multiproduct business firm. The course is divided into two sections. The first is concerned with the environment of the firm, including the economic, sociological, psychological, and demographic factors affecting demand; marketing institutions; and government-business relations. The second is concerned with the management problems of product planning, channels of distribution, pricing, promotion, and competitive strategy. In approaching the solution to these problems, attention will be directed to the contributions of the social sciences, marketing research, and management science.

127. OPERATIONS MANAGEMENT. Second term. Credit three hours. Mr. L. Joseph Thomas.

This course introduces major economic decision problems of production and operations management: selection and configuration of facilities, size and location of plants, aggregate production and work-force scheduling, multiplant allocation of product, large-scale project control (PERT), job design, production standards, production and inventory control, quality control, and short-run job-shop scheduling. Problems are analyzed through the use of traditional intuitive rules, schematic methods, incremental analysis, differential and integral calculus, linear programming, computer simulation, heuristic programming, and critical path methods. Emphasis is placed on the effectiveness and the limitations of quantitative techniques in the decision-making process. The interaction of production problems with those of other functional areas is also considered.

128. FINANCE. Second term. Credit three hours. Messrs. Schramm and Hass.

In this course the student is introduced to the principles and practices of finance and to their application in business and public administration. The uses of financial instruments, problems of short-term and long-term capital financing, methods of security distribution, financial expansion and reorganization, and the operation of specialized financial institutions and money and capital markets are surveyed. Considerable attention is given to the methods of financing current operations and to the financial problems of small business. The regulatory aspects of government financial controls are considered.

200. BUSINESS POLICY. First term. Credit four hours. Mr. Gilmore.

This course explores the integrative role of the chief executive in formulating and implementing business policy. Emphasis is first focused on the determination of corporate strategy in a variety of industrial situations described in cases. The student is asked to identify corporate strategy of the company described, to evaluate that strategy for its soundness, and to decide what changes in strategy he would recommend. Particular attention is given to the extent to which final choice of strategy requires reconciliation of market opportunity, company capabilities and resources, personal values and aspirations, and obligations to segments of society other than the stockholder. An effort is made to develop useful approaches to preparatory analysis, policy formulation through group discussion, development of policy proposals, and preparation and presentation of policy reports. Attention is then directed to implementing corporate strategy through consideration of organizational structure and relationships, organizational processes and behavior, and the role of leadership in the achievement of purpose. Problems of organizational planning are considered, including such issues as line-staff relationships, centralization versus decentralization, functional versus product organization, and committee management versus individual authority. Questions relating to executive control are explored. *Prerequisite:* Open to second-year M.B.A. students and to others with consent of the instructor.

For M.P.A. Candidates

130. MANAGEMENT OF PUBLIC AGENCIES I. Second term. Credit three hours. Mr. Van Riper.

The year-long sequence of Courses 130 and 131 relates primarily to the internal management of governmental agencies in carrying out their program responsibilities. The point of view is that of top executives, whatever the level of government, rather than that of the specialist or technician. Course 130 emphasizes the executive role in government, large-scale organization theory, decision processes, the mobilization of resources (especially personnel and materiel), program management, management analysis, and reorganization and response to change. (*Note:* Courses 130 and 131 form a coordinated sequence but, with consent of the instructor, may be taken separately.)

131. MANAGEMENT OF PUBLIC AGENCIES II. First term. Credit three hours.

A continuation of Course 130, work in this course focuses on program planning, governmental finance, budgeting, supply and materiel, and program evaluation and review. (*Note: Courses 130 and 131 form a coordinated sequence but, with consent of the instructor, may be taken separately. Course 131 will not be offered in 1968-69.*)

555. ISSUES OF PUBLIC POLICY AND ADMINISTRATION. Second term. Credit three hours. Mr. Rettig.

This course, which is viewed as a sequel to Courses 130 and 131, focuses on substantive policy issues in selected local, national, and international program areas. Through extensive readings, case review, and individual research, an intensive analysis is made of interactions among economic, technological, and political forces affecting major questions of public policy. The response of public bureaucracies to such forces is examined. Consideration is given to such factors as executive-legislative interest-group relations, intergovernmental coordination, and relationships between political leaders and professional experts. *Prerequisite:* Open to second-year students.

For Hospital Administration Students

140. INTRODUCTION TO HOSPITAL AND MEDICAL CARE ORGANIZATION. Second term. Credit three hours. Mr. Battistella.

Health services are described and analyzed against the backdrop of recent political, social, and economic developments in the United States and Western Europe. For purposes of organization and understanding of forces for change, health services are viewed as a social system—The Medical Care System—organized along structural-functional lines. Alternative methods of organizing and financing health care services are examined in an effort to evaluate the capacity of the medical care system to respond to pressures generated by changing disease patterns and rising expectations for medical care. The roles and responsibilities of various institutions and professional groups are examined, with particular emphasis on the hospital as the central institution in the provision of community medical care. The process of community planning for health and welfare services is studied, and the relationship of the hospital to that process is analyzed.

141. INTRODUCTION TO CLINICAL MEDICINE AND PUBLIC HEALTH. Second term. Credit three hours. Dr. Samson.

The objective of this course is to familiarize the student with the principal diseases of modern life and to demonstrate how these conditions are controlled in individuals and in communities. Major emphasis is given to those conditions which directly affect the management of hospitals. Consideration is given to the training of physicians, medical and surgical specialists, nurses, and other personnel; the nature of specialized hospital equipment and other facilities

for diagnosis and treatment; and the principal procedures used by physicians in diagnosis and treatment in hospitals and in their offices. Major public health problems of various parts of the contemporary world are discussed, and visits are made to near-by hospitals and medical centers at appropriate points in the course.

Note: Hospital administration candidates for the M.B.A. are expected to enroll in Course 128, Finance, and Course 200, Business Policy, but not in marketing or operations management. Hospital Administration candidates for the M.P.A. must complete Course 555, Issues of Public Policy and Administration.

Elective Courses

Accounting and Business Law

300. INTERMEDIATE ACCOUNTING. Second term. Credit three hours. Mr. Young.

This course involves a review of accounting concepts and procedures with particular emphasis on the reasoning behind methods of measuring and recording such items as depreciation, inventory flows, and revenues. The implications of accounting theory and practice for the measurement of income and financial positions are investigated. The uses and limitations of accounting data presented in published financial reports for financial analysis, including ratio analysis, are considered. The course gives the student an opportunity to study the concepts of financial accounting in the context of current issues and practices. *Prerequisite:* Course 122 or equivalent.

301. ADVANCED ACCOUNTING. Second term. Credit three hours. Mr. Drebin.

This course is concerned with accounting concepts and procedures in a variety of specialized situations: corporate consolidations and mergers, multinational operations, partnerships, installment sales, price level changes, and non-profit organizations. Emphasis is placed on problem solving, and the course is required for candidates electing the Certified Public Accounting concentration. *Prerequisite:* Course 300 or consent of the instructor.

302. COST ACCOUNTING. First term. Credit three hours. Mr. Dyckman.

This course includes a review of basic classifications and methods for recording costs, an analysis of manufacturing cost components, and a comparison of different types of cost accounting systems. Particular emphasis is given to cost reports for management and to the use of cost information and flexible budgets in controlling operations and making decisions. Investment, make or buy, and size of plant decisions are investigated, and different decision rules are compared. *Prerequisite:* Course 122.

303. SEMINAR IN FINANCIAL POLICY AND MANAGERIAL ACCOUNTING. Second term. Credit three hours. Mr. Bierman.

This course deals with a variety of problems of managerial decision making. Many of the situations involve the use of accounting information and internal reporting systems (and measurement techniques). A large portion of the course is concerned with capital budgeting decisions (evaluating investment proposals) and financial policy decisions. The financial decisions are approached (where feasible) from a model building analytical point of view. Among the financial decisions considered are dividend policy, credit decisions, cash management, stock reacquisitions, stock options, cost of capital, and capital structure. *Prerequisite:* Open to second-year students only.

304. SEMINAR IN FINANCIAL ACCOUNTING. Second term. Credit three hours. Mr. Drebin.

This course is concerned with the theory of income determination and measurement. Economic concepts of income and problems of measurement are explored with reference to their applicability to the modern corporate enterprise. Particular items which affect income measurement, such as the treatment of research costs, pension plans, and asset valuation, are considered. *Prerequisite:* Course 300 or consent of the instructor.

305. FEDERAL TAXATION AND DECISION MAKING. First term. Credit three hours. Mr. Bierman.

This course is concerned with three aspects of federal taxation: the major provisions of the internal revenue code, the impact of the code on business decision making, and public policy considerations. Emphasis is given to the taxation of individuals and corporations. Financial and tax accounting procedures are contrasted. *Prerequisite:* Course 122 or equivalent.

306. GOVERNMENTAL ACCOUNTING. Second term. Credit three hours.

Special problems studied in this course include fund and budgetary accounting, accounting for municipal utilities and public business enterprises, cost accounting in public management, developments and special approaches in federal accounting, and the analysis of financial statements for managerial and investment purposes. Contrasts between governmental accounting and commercial accounting are emphasized. *Prerequisite:* Course 122. [Not offered in 1968-69.]

308. LAW OF BUSINESS ASSOCIATIONS. Second term. Credit four hours. Mr. Bugliari.

This course is an introduction to the basic purposes and logic of the law as it applies to business enterprises and their operations. The fields of personal property, contracts, agency, partnerships, corporations, and real property are em-

phasized. A combination of text and case study is used. The course is required of all students in professional accounting and is strongly recommended for students whose area of specialization is finance.

309. ADVANCED BUSINESS LAW. First term. Credit four hours. Mr. Bugliari.

This course considers the law pertaining to bailments, sales, secured transactions, bankruptcy, negotiable instruments, insurance, and trusts and estates. Both text and case materials are employed. *Prerequisite:* Course 308 or consent of the instructor.

Finance

426. FINANCIAL MANAGEMENT. First term. Credit three hours. Mr. Nilsson.

This course deals with the problem of managing business funds as viewed from the position of the corporate financial officer. The case method is used. Selected problems on promotion, financing, planning of capital structures, securities issuance, mergers and consolidation, and reorganization under the federal Bankruptcy Act are considered. Instruments of long-term finance and security devices are studied in detail. Problems of working capital management, methods of budgetary control, and financial planning in relation to reserve, surplus, and dividend policies are studied. The impact of federal government regulations on corporate financial policy is considered. *Prerequisite:* Course 128.

427. INVESTMENT MANAGEMENT. Second term. Credit three hours. Mr. Nilsson.

This course is designed primarily for students planning to enter the fields of investment banking and institutional investment. Methods of security analysis, the uses of technical aids in investment analysis, and policies governing the management of private and institutional investment funds are studied in detail. Other topics include the organization and functioning of underwriting firms, methods of security distribution, the operation of security markets, brokerage activities, investment counseling, and investment trust management. Detailed attention is given to the regulatory activities of the Securities and Exchange Commission. *Prerequisite:* Courses 128, 300, and 426 or consent of the instructor.

428. GOVERNMENTAL FISCAL MANAGEMENT. First term. Credit three hours.

Emphasis is on federal fiscal management, including federal debt management, tax policy formulation, the use of the federal budget as a planning and control instrument, proposals for central government capital budgeting, and federal-state fiscal relations. Some attention is also given to long-term economic and financial planning by less developed countries. *Prerequisite:* Course 120 or consent of the instructor.

429. FINANCIAL INTERMEDIARIES AND MONEY AND CAPITAL MARKETS. Second term. Credit three hours.

The first half of this course investigates the nature and functions of financial intermediaries. The growth of these institutions, their significance in the savings-investment process, their portfolio preferences, and their investment performances are analyzed. The second half of this course examines the operations of various segments of the money and capital markets and the roles of financial intermediaries as buyers and sellers in these markets. Particular emphasis is given to markets for U.S. government securities, corporate equities, and municipal bonds. *Prerequisite:* Course 128. [Not offered in 1968-69.]

430. MONEY AND BANKING. First term. Credit three hours. Mr. West.

Monetary factors influencing the level of national income, the rate of interest, and the price level are examined in this course. The traditional roles of commercial banks, the Federal Reserve, and the Treasury in affecting the demand and supply of money are investigated. Attention is focused on the extent to which growth of non-bank financial intermediaries and recent international monetary developments have altered these roles. Issues in the formation of policies for monetary stabilization are studied.

432. CAPITAL FINANCING SEMINAR. First term. Credit three hours. Mr. Nilsson.

In this seminar the considerations involved in the choice of methods of long-term capital financing are examined. *Prerequisite:* Open to students especially interested in corporate finance with consent of the instructor.

433. SEMINAR IN ORGANIZED MARKETS. First term. Credit three hours. Mr. Smidt.

Organized markets are those in which buying and selling are done only by professionals acting as brokers or trading for their own account. Examples are the New York Stock Exchange, the Chicago Board of Trade, and the government bond market. This course offers a comparative study of several such markets, considered as economic institutions. Examples of topics that may be considered are the economic and historical conditions under which organized markets originate, reasons for differences in institutional structure among such markets, the role of professionals who trade for their own account, factors determining the demand and supply of liquidity, transaction costs, government regulation of organized markets, the random walk theory, and the response of market participants to new information. Except incidentally, the course does not consider methods of estimating the intrinsic value of the assets traded on such markets. Students are expected to become thoroughly familiar with the institutional arrangements of at least one organized market and to prepare a seminar report on at least one topic or problem common to several organized markets. *Prerequisite:* Consent of the instructor. [Not offered in 1968-69.]

Hospital and Medical Care Administration

Note: The two core course offered in this field are listed and described on page 38.

142. SOCIOLOGY OF COMMUNITY HEALTH CARE. Second term. Credit three hours. Mr. Battistella.

The aim of this course is to provide future administrators, planners, and researchers with an introduction to social theory and research useful for the formulation and delivery of community health services. The course emphasizes two major areas of consideration. The first concerns the significance of socio-cultural and social-psychological factors for the initiation and utilization of health services. Specific topics covered include disease and its interpretation, sick role theory, the doctor-patient relationship, and the role of health care facilities and treatment patterns in bringing about behavioral change. The second major area emphasized in the course is that of the structure and dynamics of community decision making. Key topics in this area are community power structures and pathways to social change.

450. EVALUATION OF COMMUNITY HEALTH SERVICES. First term. Credit three hours. Mr. Brown.

The purpose of this course is to allow the students the opportunity to apply their knowledge concerning the organization and provision of health services in an actual community setting. In small groups, the students are given the assignment of evaluating a community's medical care programs in relation to the comprehensive health care needs of its population. Special attention is given in the classroom to the topics of the quality of medical care, hospital utilization, the community health center concept, and planning for community health services. A written report is required.

451. PSYCHIATRIC INSTITUTIONS: ADMINISTRATION AND PRACTICE. Second term. Credit three hours. Drs. Daly and Johnson.

The purpose of this course is to review with the student the current perceptions of, and prescriptions for, psychiatric problems. This is accomplished by an explication of the histories and philosophies of the care and cure of patients, an exposition of clinical syndromes, and an examination of the contemporary forms of treatment and practice in their institutional settings—the mental hospital (public and private), psychiatric units in general hospitals, outpatient clinics, private practice, community mental health centers, and in-programs of prevention. The contributions of diverse sciences, technologies, and arts to the organization of theory and practice are emphasized throughout the course.

452. THE HEALTH PLANNING PROCESS. Second term. Credit three hours. Mr. Brown.

This course is designed to broaden the students' understanding of the dynamics

of the areawide health planning process. Through observation and participation in one of the health planning endeavors in the Central New York region together with classroom seminars, the student is afforded the opportunity to gain insights into the procedural as well as the social and political aspects of the planning process. Emphasis is given to the development of strategies for the implementation of positive medical care goals.

453. LEGAL ASPECTS OF HOSPITAL ADMINISTRATION. First term. Credit two hours. Mr. Bugliari.

This course introduces the student to those principles of the law which are specifically applicable to hospitals. Topics considered include the liability of hospitals and their staff and personnel for injuries to patients, medical records and disclosure of information, consent to medical and surgical procedures, responsibility for the patient's personal property, collection of bills, medical staff privileges, pharmacy, labor law, and confidential communications.

454. POLICY AND PLANNING FOR HEALTH CARE. Second term. Credit three hours. Mr. Van Ness.

This course examines the decision-making processes of health care, whether physical, mental, or environmental, as they relate to the development of public and private health policies. Comprehensive health planning as an instrument of change is described and analyzed within the context of contemporary health affairs. Attention is given to the interrelationships of policy and planning within the larger socio-political framework.

455. SEMINAR IN HEALTH RESEARCH. Second term. Credit three hours. Mr. White.

The primary objective of the course is to increase the student's ability to evaluate research reports and other studies, to assess their relevance for the field, and to formulate his own problems in a manner conducive to scientific investigation. An examination is made of the contributions of the social sciences and other disciplines to an understanding of current problems in the health field and in hospital administration in particular.

457. HEALTH ECONOMICS. Second term. Credit three hours. Mr. MacIntyre.

This course considers the provision of medical care as an economic activity. Individual, family, and national expenditures for medical care are studied in relation to the various factors which influence them, including supply and demand, unit costs, utilization rates, traditional and evolving patterns of distribution, and changing medical technology. Major emphasis is given to the problem of the rising costs of hospital care and to the actual and potential role of administration in helping to control them. The principles underlying commer-

cial health insurance, nonprofit prepayment and service plans, and health programs under social security and public welfare are analyzed in detail. Government programs of health care in this country, existent and proposed, are analyzed and compared with experiences with similar programs in foreign countries.

458. HEALTH AND WELFARE POLICY: FOUNDATIONS AND STRATEGIES. First term. Credit four hours. Mr. Battistella.

The major objectives of this course are the identification and analysis of salient ideological currents influencing the development of social policy in the U.S. and the construction of a framework for understanding and coping with complex policy issues. Health and welfare issues are seen as reflecting alternative solutions to the broader institutional problems of allocation (economics), control (politics), and normative behavior (morality). Because it serves to establish goal parameters and means of goal attainment, ideology is viewed as the main-spring force of institutionalized systems for the provision of health and welfare services. The basic tenet of the course is that health and welfare policy is deeply rooted in the value system of society.

Note: For requirements in the new concentration in comprehensive health planning see page 30.

International Business and International Development

625. INTERNATIONAL BUSINESS POLICY. Second term. Credit three hours. Mr. Gilmore.

As a sequel to Course 200, this course stresses the problems of planning and organizing worldwide operations. Utilizing business-policy concepts of strategy formulation and implementation developed in Course 200, the student explores case problems in multinational companies. Discussion centers on general managers who coordinate all functional activities required for profit responsibility at either headquarters or subsidiary levels. The course affords the student an opportunity to gain further experience in applying the approaches developed in Course 200 in situations rendered more complex by virtue of such additional considerations as exchange problems; tax policies; nationalistic pressures; and differences in language, currency, laws, and culture. Of particular concern is the difficulty of devising effective means of managing decentralized operations on a global scale. *Prerequisite:* Course 200 or consent of the instructor. [Not offered in 1968-69.]

626. INTERNATIONAL MARKETING. Second term. Credit three hours. Mr. Rathmell.

This course stresses the techniques of marketing to and within different national and regional economies (the European Common Market, for example). Problems of planning and staffing multinational marketing organizations are

studied. Attention is directed to the impact of different political-economic systems and management philosophies on the marketing process. The quantitative and qualitative characteristics of various national markets are studied together with international and national regulation of marketing. *Prerequisite:* Course 126 or consent of the instructor.

627. AMERICAN BUSINESS OPERATIONS ABROAD. Second term. Credit three hours. Mr. Bent.

This is an introductory course in international business which surveys the various problems facing American business operated outside the United States. The topics of discussion include the effect of the overseas environment on American business, selected organizational and administrative problems of international business, and the impact of U.S. government policies and regional agreements on American overseas business operations. *Prerequisite:* Course 120 or consent of the instructor.

628. SEMINAR IN INTERNATIONAL BUSINESS. Second term. Credit three hours. Mr. Bent and Miss Ballantyne.

This course brings to the campus fifteen to twenty business and government executives to discuss certain operational problems of international business, the policies of the government toward American business overseas, and the role of U.S. business in economic development. The class meets two times each week: discussion with the guest lecturers are held on Monday and are followed by a critique later in the week. *Prerequisite:* Course 627 and Course 625 (these can be taken concurrently).

629. ADMINISTRATION OF PUBLIC OPERATIONS ABROAD. Second term. Credit three hours. Mr. Bent.

This course considers the politics and administration of U.S. government overseas operations. Specific attention is given to the Departments of Defense and State, the Agency for International Development, and the United States Information Agency. The planning, coordination, and evaluation of foreign aid policy are studied along with the role of Congress in determining objectives and assessing results. Certain recipient countries are selected to study the problems of implementation and the effects of foreign aid on political, social, and economic development. *Prerequisite:* Course 120 or consent of the instructor.

630. SEMINAR IN IDEOLOGY AND POLITICAL CHANGE (Government 545). Second term. Credit four hours. Mr. Ashford.

The philosophical and ideological roots of nationalist thought in developing countries are examined. Particular attention is given to the modification and elaboration of nationalism in response to the achievement of independence and the growing commitment to rapid development. The major approaches to the study of nationalism are critically examined. [Not offered in 1968-69.]

631. SEMINAR IN POLITICAL DEVELOPMENT AND SOCIAL CHANGE (Government 537). First term. Credit four hours. Mr. Ashford.

This seminar introduces problems of political and administrative reorganization in rapidly changing nations. Analytical problems of identifying trends and critical relationships are considered, and a critical assessment is made of several different approaches to generalizations about rapid change in developing countries. The seminar presents materials useful to students considering careers in U.S. public and private agencies overseas and international organizations and to those interested in research in developing countries.

632. SEMINAR IN ADMINISTRATION AND DEVELOPMENT. Second term. Credit four hours. Messrs. Ashford and Dotson.

This course is designed as a sequence to the seminar in the developmental process (Course 631). It gives particular attention to several schemes for the analysis of administrative behavior in developing nations. The seminar considers the administrative problems resulting from increased functional specialization in both the public and private sectors of national affairs and also the problems of diffusing and decentralizing administrative chores to lower levels and over wider geographic areas. *Prerequisite:* Course 631 or a comparable interdisciplinary course.

633. COMPARATIVE PUBLIC ADMINISTRATION. First term. Credit three hours.

Public administration systems of the U.S., England, and Turkey are analyzed with the use of political and sociological concepts. Typical predeterminants of modern bureaucracy are reviewed and used to determine the comparative level of administrative development in the societies concerned. The influence of selected social institutions and values on the bureaucracy in each country is determined, including such critical variables as the governmental system (e.g., separation of powers), class structure, educational philosophy and system, attitudes toward authority, and stage of political and economic development. Students prepare papers analyzing the influence of such variables in one of the societies considered. [*Not offered in 1968-69.*]

634. POLITICAL AND ECONOMIC CHANGE IN CONTEMPORARY EUROPE (Government 544). Second term. Credit three hours. Mr. Einaudi.

Emphasis in this course is placed on the key manifestations of change since the War including the crisis of parties and of social and political institutions, new instruments of public policy, the varieties of public corporations and planning agencies, the social and technological revolutions and private enterprise, and the search for new dimensions of government: regionalism and the supranational communities.

635. APPROACHES TO THE ANALYSIS OF SUBJECTIVE CULTURE. First term. Credit three hours. Mr. Triandis.

This course presents an analysis of the phenomenological field of persons who have grown up in different cultures. A variety of approaches, including the use of componential analysis, the semantic, behavioral, and role differentials, studies of stereotypes, and the use of free associations, are reviewed.

636. CITY AND REGIONAL PLANNING IN LATIN AMERICA. First term. Credit three hours. Miss Ballantyne.

This course is concerned with the growth of planning in Latin America. The major problems of the planning process, including economic, geographical, and manpower factors, are investigated. Three Peruvian case studies, exemplifying current Latin American planning practices and methodology, are presented.

Managerial Economics and Economic Policy

202. BUSINESS ENTERPRISE AND PUBLIC POLICY. Second term. Credit three hours. Mr. Hutchins.

This course is an integrating study of the interrelations among individuals, business firms, and governments in American society. It focuses attention on the problems of exercising socially responsible business leadership and on the nature and objectives of selected public policies impinging on business. The more important topics covered are management and the individual, or the philosophy of the business society; management's responsibilities to the organization, including certain problems of posture and practices; management's relations with rivals, especially problems of monopoly and competition and the antitrust laws; management's responsibilities to customers, particularly with respect to promotional practices; the special responsibilities of those businesses affected with a public interest, such as transportation companies; the unusual problems of managements entrusted with roles in the national defense, especially in connection with radical innovation and technological development; the positions of firms receiving subsidies designed to promote public objectives, such as shipping enterprises; and finally management's role in the foreign relations of the U.S., particularly with respect to trade, investment abroad, and foreign policy. Lectures and cases are used. [*Not offered in 1968-69.*]

375. ECONOMIC AND BUSINESS HISTORY. First term. Credit three hours. Mr. Hutchins.

This course focuses on the evaluation of economic organization and on the development of the role of the business firm therein. The primary emphasis is on the U. S. since 1750, although some attention is given to earlier times and to European origins and developments. The analysis of the development of business organization, administration, and policy proceeds in part by means of historical case studies. Attention is paid to the relations between business

policies and the rise and fall of firms and industries and to the interactions of business and public policies [*Not offered in 1968-69.*]

376. BUSINESS POLICY AND ECONOMIC INSTABILITY. Second term. Credit three hours. Mr. de Chazeau.

This course deals with an economic analysis of government monetary-fiscal policies and their impact on business behavior. The scope and efficacy of these policies are appraised in terms of their national objectives: high productive employment, economic growth, price stability, and balance in international payments. Particular attention is given to probable impacts on business management responsibilities, especially in the pricing of products and the negotiation of wages and on opportunities stemming from better forecasting and planning. Student panel reports and class discussion are stressed. *Prerequisite:* Open to second-year students and to others with the consent of the instructor.

377. COMPETITIVE BEHAVIOR AND PUBLIC POLICY. Second term. Credit three hours. Mr. de Chazeau.

This course is concerned with problems posed by public policies designed to assure acceptable market performance in the public interest. The focus of analysis is the formulation and administration of the antitrust laws in imperfect markets in the presence of dynamic change in industrial organizations and market structures. Attention is also given, on a more selective basis, to problems of public regulation of industry raised by important changes in their technological and competitive environment. Case analyses and class discussion are stressed. *Prerequisite:* Open to second-year students and to others with consent of the instructor.

379. ECONOMIC EVALUATION OF CAPITAL INVESTMENT PROJECTS. Second term. Credit three hours. Messrs. Smidt and Dyckman.

This course deals with the economic evaluation of proposed capital investment projects. Theoretical literature and case studies of particular projects are considered, with a view to providing the student with a reasonable background for practical work in project evaluation and for independent research on the many unsolved analytical problems in this field. Illustrative of the topics considered are the following: the selection of the best project in a group of mutually exclusive alternatives, criteria for determining the total size of an investment budget, methods of allowing for uncertainty about project outcomes, and the effect on project selection of the financial environment in which an organization operates. Capital project evaluation is of practical significance to private business firms, to non-profit organizations, and to local and national governmental bodies. The main analytical techniques apply with only slight modifications in all of these institutional contexts, and an analysis of the financial environment of any one type of institution requires a consideration of the interrelationships among the various institutions. *Prerequisite:* Open to second-year students and to others with consent of the instructor.

380. MANAGERIAL ECONOMICS WORKSHOP. First term. Credit three hours. Mr. McAdams.

This course is given by a group of interested faculty members and deals with topics of mutual interest to students and faculty as determined at the first organizational meeting of the course. The range of possible topics includes advanced approaches to investment analysis, specific studies and cases in the managerial use of regression analysis, dynamic programming as a management tool, break-even analysis under conditions of uncertainty, an approach to pricing of computer time as an example of utility pricing, capital budgeting in non-profit industries, methods of subsidization as influences on decision making, and Markov processes for analysis of management problems.

424. ANALYSIS OF AMERICAN INDUSTRIES. First term. Credit three hours. Mr. de Chazeau.

This course focuses on individual research. Class analysis of published industry studies is used to develop approaches to the identification and appraisal of institutional, structural, and technological forces affecting company behavior and economic growth in the presence of competitive opportunities and public policies. Each student then researches, analyzes, and writes a report on an industry, including a sample of representative firms, as approved by the instructor, and he defends his study before the group. Thus, each student is required to develop a knowledge of all industries covered in the course. *Prerequisite:* Consent of the instructor.

Marketing

475. SALES MANAGEMENT. First term. Credit three hours. Mr. Rathmell.

This course consists of five parts. The first two—organizing the marketing function and staffing the marketing organization—encompass all marketing activities of the firm and draw upon the contributions of the behavioral sciences. The last three—planning, implementing, and evaluating—are confined to sales-force operations and stress policies and techniques which have evolved within the field of sales management. Throughout, responsibilities of both home office and field management are considered. *Prerequisite:* Course 126.

476. MARKETING RESEARCH. First term. Credit three hours. Mr. Hughes.

This course reflects the broader role of marketing research, not just survey research. Subjects discussed include the measures and models of market potential, market structure, and marketing productivity. The techniques include scaling devices, mathematical models, experimentation, sample design, questionnaire design, and basic statistics. *Prerequisite:* Courses 123 and 126.

478. **ADVERTISING MANAGEMENT.** Second term. Credit three hours. Mr. Hughes.

This course is designed to develop the student's ability to recognize advertising opportunities, to determine goals, to allocate advertising effort through the most efficient media, and to evaluate the effectiveness of this effort. Since this is a course in strategy, not in tactics, discussions of copy, layout, art, and typography are omitted. Reading assignments stressing concepts and methodology are followed by cases that provide an opportunity to apply advertising principles. The last third of the course includes discussions of the regulation of advertising, social and economic effects, and new developments such as advertising experiments, mathematical models, and computer applications. *Prerequisite:* Course 126 or consent of the instructor.

480. **MARKETING STRATEGY.** Second term. Credit three hours. Mr. Rathmell.

This course considers the role of product, pricing, promotion, and channel and physical distribution in the development of a firm's integrated marketing program. The contributions of marketing research and operations analysis are stressed. Cases are used extensively to evaluate and compare alternative courses of action. Team reports are submitted to a business enterprise on problems of marketing strategy with which it is currently concerned. *Prerequisite:* Course 126.

481. **SEMINAR IN MARKETING THEORY.** First term. Credit three hours. Mr. Rathmell.

Following a consideration of the historical development of marketing thought, students survey the contributions of economics, behavioral science, and mathematics to a better understanding of the marketing process. Synthesis of these contributions by the marketing economist is stressed. The first part of the course is devoted to demand; the last part deals with the supply side of the market. *Prerequisite:* Consent of the instructor.

482. **SEMINAR IN MARKETING AND THE MANAGEMENT SCIENCES.** Second term. Credit three hours.

The purpose of this seminar is to explore the present and future implications for marketing management of developments in the social and management sciences. Principal emphases are placed on improving understanding of the nature and complexity of marketing decision areas through examination of relevant quantitative models, developing criteria for evaluating the utility of such models and associated measurements for marketing management, and assessing the nature of interaction between the changing environment of marketing decision making and the continuing developments in the management sciences and computer-based information systems. Students are expected to assist in directing the seminar and are required to present papers or projects. *Prerequisite:* Course 126 and consent of the instructor. [Not offered in 1968-69.]

Note: Students interested in this field may also elect Course 626, International Marketing, described on page 45.

Organizational Behavior and Personnel

121. PERSONNEL ADMINISTRATION AND HUMAN RELATIONS. First term. Credit three hours. Mr. Brooks.

The objective of this course is to develop an understanding of the policies, methods, and techniques, utilized in personnel management and human relations as management functions. Specific attention is given to problems of recruitment, selection, training, compensation, motivation, communications, service and benefit programs, performance evaluation, management by objectives, safety, discipline, and community relations. The capacity to analyze problems, select the most effective means of dealing with them, and plan appropriate courses of action is developed through case examples. Attention is also given to analysis of trends in personnel management.

500. HUMAN RELATIONS IN ADMINISTRATION. Second term. Credit three hours. Mr. White.

In this course a critical examination is made of the ideas and research findings underlying various approaches to human relations problems in complex organizations. The aim is to develop insights into the human and social elements of organizational behavior through both discussion and participation in classroom exercises. Topics covered include motivation and morale, perception and reactions to others, selection and appraisal, role behavior, communication, attitude measurement, organizational development and change, group dynamics, and leadership. The relevance of recent research studies in these areas is discussed, and the class itself serves as a learning laboratory for some area of interest. *Prerequisite:* Course 120 or equivalent.

501. PUBLIC PERSONNEL MANAGEMENT. Second term. Credit three hours. Mr. Van Riper.

The organization and operation of public personnel systems are covered in this course. The traditional personnel functions of selection, training, classification, etc., are treated briefly, but the primary emphasis is on the concepts of personnel systems (U.S. versus foreign), manpower management as a total governmental problem, the development of a coordinated personnel program, and union-management relations. *Prerequisite:* Courses 120 and 121 or consent of the instructor.

502. ORGANIZATIONAL BEHAVIOR AND ADMINISTRATION. First term. Credit three hours. Mr. Brooks.

Cases, concepts, and research findings in organizational behavior and administration are covered in this course. Human problems in administration, methods of diagnosing situations, group behavior, intergroup reactions, and organizational change are analyzed. *Prerequisite:* Course 121 or 101S.

503. BUSINESS AND INDUSTRIAL PERSONNEL. Second term. Credit three hours. Mr. Brooks.

This course is concerned with the advanced study of selected areas of personnel administration. The role of action research is stressed. Individual and group research projects are emphasized. In addition, readings, case studies, and guest speakers are utilized. *Prerequisite:* Course 121 or 101S. Enrollment limited to 24 students.

902. SEMINAR IN ORGANIZATION THEORY. First term. Credit four hours. Mr. Starbuck.

This course involves a systematic assessment of the current state of knowledge about complex organizations. The basic approach is interdisciplinary, but somewhat greater emphasis is placed on organizations as integrated structures than on organizations as environments for individual behavior.

903. CURRENT RESEARCH IN UNIVERSITY ADMINISTRATION. Second term. Credit three hours. Mr. Starbuck.

This course is a research seminar in the administrative practices of universities. The purpose is to examine recent research concerning the ways universities are managed or ought to be managed, with greater stress on the selection and achievement of major goals than on the implementation of specific practices.

907. SPECIAL TOPICS IN ORGANIZATIONAL THEORY AND BEHAVIOR. Second term. Credit three hours.

In 1968 this course is devoted to an examination of the theory and practice of sensitivity (T-group) training as applied to a variety of organizational and educational settings. For a part of the term use is made of various experimental methods of learning, including the T-group, participation-observation exercises, and other recent innovations in this type of training. During the remainder of the term the theoretical and practical issues underlying application of these methods are examined in detail. Participation of both Master's degree and Ph.D. candidates is welcomed. [*Not offered in 1968-69.*]

Note: Students interested in this field may also elect Course 451, *Psychiatric Institutions: Administration and Practice*, described on page 43.

Production and Operations Management

525. PROBLEMS AND TECHNIQUES IN PRODUCTION MANAGEMENT. First term. Credit three hours. Mr. L. Joseph Thomas.

Major economic decision problems in production management are examined. Various methods of analysis are used, including traditional intuitive rules, schematic models, and quantitative techniques. Problem areas considered include

size and location choices, process and equipment selection, aggregate production planning and scheduling, production and inventory control, distribution systems, project control, assembly-line balancing, sampling inspection and quality control, and process control. Techniques studied include calculus, linear programming and extensions, dynamic programming, computer simulation, critical path methods, heuristic programming, and statistical analysis. *Prerequisite:* Course 127 or consent of the instructor.

526. CASE STUDIES IN PRODUCTION AND OPERATIONS MANAGEMENT. Second term. Credit three hours. Mr. Hausman.

Case studies illustrating decision problems in production and operations management are analyzed with the use of techniques studied in prerequisite courses. Areas covered include aggregate scheduling, job-shop scheduling, equipment replacement, inventory and production control, and plant size and location. Students have team responsibilities for case analysis and presentation. Emphasis is placed on the awareness and resolution of difficulties encountered when one attempts to apply theoretical models to actual decision situations. *Prerequisite:* Courses 127 and 525 or consent of the instructor.

Note: Students interested in this field may also elect Courses 602 and 604, Operations Research I and II, described on pages 57-58.

Public Policy and Public Administration

550. POLITICS AND POLITICAL POWER. Second term. Credit three hours. Mr. Van Riper.

This course provides a framework for the analysis of government and politics from the standpoint of one who must concern himself with politics on behalf of his governmental agency or business concern. Emphasis is placed on basic political issues, pressure groups, the political decision-making process underlying governmental action, the basic structure and rationale of government at various levels, and the problem of political power. American political institutions are emphasized, but some attention is given to parliamentary systems and to comparisons and contrasts of democratic theory and concepts with those of socialism and communism.

553. THEORY AND PRACTICE OF MUNICIPAL FINANCE. First term. Credit three hours. Mr. Montgomery.

The development of the theory underlying municipal financial policies and its differentiation from federal fiscal policy form the basis of this course. Analyses are approached within the context of general public finance but illustrated from the special problems of cities and other metropolitan-area governments. Diversified city revenues, use of the property tax, and other tax matters are treated as part of closely interrelated state and local tax systems. Also studied are the newer

approaches to effective policy decision making, such as capital improvement programming and integrated financial planning, long-term total budgeting, revenue estimating, cost-accumulation centers, performance budgeting, and standards for the measurement of financial performance. *Prerequisite:* Course 120 or consent of the instructor.

554. SEMINAR IN URBAN GOVERNMENT AND ADMINISTRATION. First term. Credit three hours. Mr. Montgomery.

Consideration of economic, sociological, and technological developments provides a background for an analysis of urban government operations and issues in an era of metropolitan growth and change. The following areas are studied: (a) the politics of urban government, (b) structuring and functioning of urban governmental institutions, (c) problems of reorganization, intergovernmental relations, and public leadership, and (d) governmental responses to critical issues such as urban renewal, transportation, integration, and education. For the future administrator, planner, and researcher, the course provides understanding of issues, patterns of analysis, and familiarity with relevant literature.

556. SEMINAR IN PUBLIC ADMINISTRATION. First term. Credit three hours. Mr. Van Riper.

The purpose of this seminar is to develop both an understanding of and a point of view toward some of the major problems of public administration which are dealt with briefly or not at all in required coursework. Topics vary from year to year in accordance with the needs and interests of the students. During 1967-68 the course stresses problems in large-scale organization theory and practice in government, decision systems and theory, the analysis of political power, and the impact of ideology on public administration in the U.S. Other topics are agreed on in class and may include such problems as loyalty and security, ethics and conflicts of interest, the impact of separation of powers on administration, and intergovernmental relations. *Prerequisite:* Course 120 or consent of the instructor.

557. HUMAN RESOURCE DEVELOPMENT PROBLEMS IN THE METROPOLIS (Planning 780). First term. Credit two hours.

This course introduces systems of planning for human resource development and reviews social, health, and educational problems and programs and their relationship to urban development. [*Not offered in 1968-69.*]

558. CASE STUDIES IN HUMAN RESOURCE DEVELOPMENT PLANNING (Planning 781). Second term. Credit two hours. Mr. Seessel.

This course reviews methods and techniques of planning for human resource development. Specific illustrations from the fields of social, health, and educational planning, as well as more comprehensive social planning efforts, are examined.

559. CURRENT ISSUES IN SCIENCE, TECHNOLOGY, AND PUBLIC POLICY. Second term. Credit three hours. Mr. Rettig.

This course examines federal decision making in research and development, with emphasis on development of policy machinery in the Executive Office of the President and the changing role of the Congress. Special emphasis is given to resource allocation, the problems of university research, and the changes in policy with changes in federal administration.

560. SEMINAR IN URBANIZATION AND REGIONAL DEVELOPMENT. First term. Credit three hours.

This seminar concentrates on analyses of the politics of urbanization and regional development with particular emphasis on the British experience; the metropolitan, state, and regional planning process; functional and structural problems of regional planning and organization; the use of special agencies for regional development; central-regional-local relationships in planning; interest groups and planning policies; administrative competition and cooperation in planning and development; the reform of metropolitan government and planning administration; and market, political, and administrative models of the planning process. The seminar draws material from Britain, France, the United States, and Canada.

750 and 751. SEMINAR IN BUSINESS-GOVERNMENT RELATIONS I AND II. First and second terms. Credit three hours each term. Mr. de Chazeau and others.

This seminar is designed to integrate the study programs of the participants in the Cornell Career Education Awards Program (see page 89). Its focus is on the changing and increasingly significant relationships between business and government. The seminar follows two principal lines of analysis: (a) consideration of the political, economic, and social concepts upon which business-government relationships are based and (b) relating the concepts to specific policy areas of significance to the emerging problems of public affairs. From the examination of public-private sector relationships in a variety of settings, both domestic and foreign, an attempt is made to arrive at generalizations of broad applicability and importance for the future. Members of the School and University faculty join in conducting portions of the seminar, and outside scholars and practitioners are invited to participate in particular sessions. *Prerequisite:* Consent of the instructor.

Quantitative Analysis

402. QUANTITATIVE APPROACHES TO MANAGEMENT DECISIONS. First term. Credit three hours.

The use of quantitative analysis for making business decisions is emphasized in this course. Elementary probability theory is applied to capital budgeting,

inventory, and cost control situations. Other topics include utility theory, game theory, linear programming, and queuing theory.

456. SEMINAR IN QUANTITATIVE METHODS. Second term. Credit three hours. Mr. Dyckman.

The material in this course is an extension and continuation of the work begun in Course 123. Topics covered are drawn from the following: further work in probability, Monte Carlo techniques, sampling methods, procedures for estimation and prediction, statistical inference, econometric models, and topics in decision theory. The course stresses the logic of methods and provides a less mathematically oriented basis for Courses 602 and 604 than do Courses 600 and 601. *Prerequisite:* Course 123 or consent of the instructor. [Not offered in 1968-69.]

600. INTRODUCTION TO PROBABILITY THEORY (Industrial Engineering 9460). First term. Credit four hours.

This course deals with definitions of probability and basic rules of probability theory, random variables, probability distributions, and expected values. Included are important special distributions and relations among them, and elementary limit theorems. Stochastic processes and Markov chains are introduced, and their applications in the construction of mathematical models for administrative decisions are considered. *Prerequisite:* Calculus (*Note:* This course may be substituted for Course 123 in the core requirements.)

601. INTRODUCTION TO STATISTICAL THEORY (Industrial Engineering 9470). Second term. Credit four hours.

This course considers the application of statistical theory to problems associated with the analysis of data. Involved are principles of statistical inference, estimating the value of unknown parameters of probability distributions and the testing of hypotheses concerning these parameters, and elements of statistical decision theory. An introduction to correlation theory and curve fitting by least squares is included. *Prerequisite:* Course 600 or equivalent. (*Note:* This course may be substituted for Course 123 in the core requirements.)

602. OPERATIONS RESEARCH I (Industrial Engineering 9522). First term. Credit three hours.

This course deals with model design, methodology of operations research, linear programming, the transportation problem, the assignment problem, the dual theorem, parametric linear programming, integer programming, non-linear programming, dynamic programming, and introduction to inventory theory. Emphasis is placed on comprehensive problems and case studies.

604. OPERATIONS RESEARCH II (Industrial Engineering 9523). Second term.
Credit three hours.

This course deals with decision making under risk and uncertainty, game theory, reliability theory, replacement theory, queuing (including standard birth and death processes and non-standard models), applications of queuing theory, models for production and inventory control, and simulation models. Operations Research I and II are not expected to provide an exhaustive treatment; rather they will examine the broad range of operations research problems and the standard techniques used to approach them. *Prerequisite:* Course 600 or consent of the instructor.

605. DATA PROCESSING SYSTEMS (Industrial Engineering 9582). First term.
Credit three hours.

This course is concerned with the design of integrated data processing systems for operational and financial control. Topics considered involve questions of design and organization (appropriate languages and equipment, file structures, addressing and search problems, and sorting techniques), problems of multiple remote system inputs (e.g., on-line data processing systems), and techniques of system requirement analysis. *Prerequisite:* Course 901 and consent of the instructor.

901. DATA PROCESSING SYSTEMS (Computer Science 431). Second term.
Credit three hours.

This introductory course in modern data processing systems considers problems and techniques associated with the use of such systems in various organizational environments, including industry, government, and hospitals. The course presents an introduction to data handling equipment, programming, and applications and considers control and decision functions as well as routine operations. The emphasis is on problem analysis and system planning rather than on programming, although students have programs processed at the Cornell Computing Center.

Transportation

575. TRANSPORTATION: RATES AND REGULATIONS. First term. Credit three hours. Mr. Hutchins.

This study of American transportation is focused on economic organization, public policy, and the rate-making process. The emphasis is on the theory and practice of rate making in an environment complicated by fixed, joint, and common costs, by competition among differing modes of transport, and by complex patterns of regulation. Although primary attention is given to railroad economics and policies, other modes are considered from time to time. Cases are used. Among the topics discussed are rates and the location of industry and trade, the theory of rates, the development and current content of U. S. inland trans-

portation policy, the construction of rate systems, problems in competitive marketing, new types of rates and services, certain detailed problems of regulation, and the complexities of intercarrier relations within a national transportation system. [Not offered in 1968-69.]

576. TRANSPORTATION: STRUCTURES, OPERATIONS, AND POLICIES. Second term. Credit three hours. Mr. Hutchins.

This course is a continuation of Course 575 (which is a desirable, but not essential, prerequisite). Attention is focused first on the features of industrial organization in merchant shipping, air transportation, and domestic surface transportation (rail, truck, and barge), with special emphasis on market structures, business conduct, and relevant public policies. In this connection various problems of inter- and intramodal relations are discussed, including consolidations, finance, and public promotion. The second portion of the course is devoted to problems of business administration in transportation under the headings of carrier organization, operations, finance, and general policy. In this part of the course cases and illustrations are drawn from all of the modes of transportation, and discussion is based on the earlier studies of industrial organization in the several modes. [Not offered in 1968-69.]

Miscellaneous

325. SEMINAR IN MANAGEMENT OF AGRICULTURAL INDUSTRIES. Second term. Credit three hours.

This seminar involves study of selected problems of administration and management in industries which process farm products or manufacture and distribute farm supplies and equipment. The broad basic problems specifically related to the management of agricultural industries are examined. Emphasis is given to the efficient use of resources in the processing and distribution of commodities and services used for farm production. Individual and group research projects are required, and case studies in agricultural business are used. *Prerequisite:* Consent of the instructor. [Not offered in 1968-69.]

352. PUBLIC RELATIONS AND COMMUNICATIONS CASES AND PROBLEMS (Industrial and Labor Relations 628). Second term. Credit three hours. Mr. Hodges.

Interactions between business policy and public opinion form the framework for this course. Each of a dozen areas which involve significant interplay between business and public opinion is introduced by an illustrative case and then pursued for a full week. Representative topics include the introduction of change, collective bargaining, industrial cities, and government regulation of aspects of business. *Prerequisite:* Consent of the instructor.

900. MANAGEMENT SURVEYS AND ANALYSIS. Second term. Credit three hours. Mr. Van Riper.

This course deals with the recently developing management function known variously as management analysis, management engineering, organization and methods work, systems and procedures, or administrative services. This function involves diagnosing and evaluating the effectiveness of the organization and procedures of an established enterprise (public or private) and of recommending improvements from a position either inside (line or staff) or outside (consulting firm) the enterprise. Emphasis is placed on non-financial, non-mathematical types of diagnosis and analysis in order to supplement work in other courses. Special topics include approaches to the consideration of efficiency, management audits and surveys, organization analysis, systems analysis, work measurement above the level of the individual worker, communications and paperwork analysis and control, data processing preparatory work and feasibility studies, clerical production processes, and the formulation, selling, and carrying out of recommendations. *Prerequisite:* Course 120 or consent of the instructor. Not open to those who have taken Course 130 except by consent of the instructor.

925. HONORS SEMINAR. Second term. Credit three hours.

The Honors Seminar is designed to provide to selected students the opportunity to interact with interested faculty members from a broad range of fields on current problems and major issues in business and public administration. The students as a group are expected to participate in the organization of the seminar prior to the beginning of the second semester, and each student is responsible for the planning and administration of one of the seminar sessions. All students are expected to serve on research teams, prepare papers, and interact on the full range of problems dealt with in the seminar. From time to time outstanding persons are invited to join with the seminar to discuss subjects on which they are expert. Where appropriate, joint meetings are scheduled with groups from other parts of the campus. *Prerequisite:* Eligibility for graduation with distinction and consent of the Honors Committee. Limited to a maximum of fifteen students.

Research

010. DIRECTED READING AND RESEARCH. Either term. Credit hours are adjusted to the work load assumed by the student.

Research is carried on under the supervision of staff. Registration is limited to second-year students who have the approval of their advisers and of the faculty members involved. The student may carry on research in fields of special interest in either business or public administration.

905. SEMINAR IN RESEARCH METHODS. Second term. Credit three hours. Mr. Starbuck.

This course is designed to acquaint the student with research methodology

relevant to all doctoral majors within the field of business and public administration. Substantial time is devoted to the questions of problem formulation, selection of appropriate research models, means of obtaining valid data, and techniques of information analysis. The course treats behavioral measurement and statistical problems and develops the student's ability to evaluate research projects before and after their implementation. *Prerequisite:* Statistics. Primarily intended for doctoral students.

908. SEMINAR FOR DOCTORAL CANDIDATES. First term. Credit three hours. Mr. Hausman.

This seminar is intended to provide students with an opportunity to study recent research in administration and to develop research papers under faculty guidance. The area of study will vary from year to year to allow broad coverage and wide faculty participation. In 1968-69 the seminar will focus on current research in the application of quantitative analysis to administrative problems in the areas of production, finance, and marketing. Students will present research proposals to the seminar for discussion, and will perform research and report results to the group. The research work provides an opportunity to explore possible dissertation topics. *Prerequisite:* Consent of the instructor.

Note: Students interested in health research should consider Course 455, Seminar in Health Research, listed under "Elective Courses for Hospital and Medical Care Administration."

Service Courses

101S. PERSONNEL MANAGEMENT AND HUMAN RELATIONS. Second term. Credit three hours. Mr. Brooks.

This course is designed to cover the principal personnel functions, the organizational approach of personnel administration, and the relationship of personnel to other administrative functions. Business personnel problems are emphasized, with special consideration given to recruitment, selection, placement, training, compensation, motivation, communications, discipline, safety, services, and management by objectives. *Course 101S is offered for students in other parts of the University and is not normally open to M.B.A. and M.P.A. candidates.*

112S. MANAGERIAL ACCOUNTING. Second term. Credit four hours. Mr. Young.

In developing the principles and procedures underlying general financial statements varieties of financial transactions are studied and alternative accounting treatments are analyzed for recording of sales, purchases, depreciation of long-lived assets, inventory, stockholders' equity, and bonds. An intensive review of compound interest is undertaken in connection with bonds. After the techniques of recording transactions have been studied, the tools for analysis of financial

statements are introduced. This analysis leads to a study of financial reports, including consolidated income, position, and funds statements. Attention is then directed to the preparation of accounting information useful for managerial action. The subjects covered include classifications of costs, manufacturing overhead analysis, cost systems (job order, process, and standard), variance analysis, inventory control, budgeting, break-even analysis, variable (direct) costing, cost control reports, distribution cost analysis, capital budgeting, measuring performance, and accounting problems resulting from a changing price level (including common dollar accounting). The objectives are to build skills in preparing accounting information, to develop an ability to recognize the uses and limitations of the accounting information available to management, and to apply the information in decision situations. *Course 112S is offered specifically for undergraduates and is not normally open to M.B.A. and M.P.A. candidates.*

The courses and curricula described in this Announcement, and the teaching personnel listed therein, are subject to change at any time by official action of Cornell University.



The Director of Placement interviewing a student.

IV. ADMISSIONS AND STUDENT AFFAIRS

Each year approximately 150 new students enter the Graduate School of Business and Public Administration at Cornell. The standards and procedures employed in admitting these students are explained in the first section below. In the following sections questions concerning costs and the availability of financial assistance are considered, and student activities and services are discussed.

Admissions Standards and Procedures

Eligibility

Admission to candidacy for the M.B.A. or the M.P.A. is limited to persons holding baccalaureate degrees from recognized colleges, universities, or technical schools in this country or abroad or to persons who can give evidence of successful completion of equivalent studies. While the individual's undergraduate academic record is of primary importance as an indicator of his ability to undertake graduate work in business or public administration, several other factors are taken into account. Reports concerning the applicant's intellectual and personal development as an undergraduate are considered, as is the indication of his inherent ability provided by the admissions tests referred to below. Employment experience, military service, and extracurricular activities are also weighed in the admissions review process. All of these factors are considered significant in assessing the applicant's capacity and motivation for graduate work in the School and for his later performance as a responsible and creative executive.

Undergraduate Preparation

In light of the specialization inherent in professional education at the graduate level and in subsequent professional careers, candidates are urged to pursue as broad an education at the undergraduate level as their curricula allow. Undergraduate courses in business administration

do not enhance a candidate's eligibility for admission, nor do they necessarily assure satisfactory academic performance in this School.

Although no specific undergraduate courses are required for admission, it is recommended that students planning to enter the School include in their undergraduate programs courses in economics, American government, behavioral sciences, and mathematics. The only mathematical preparation required of all students is a knowledge of high school algebra. However, recent years have seen a rapid increase in the use of computers and quantitative techniques in business and government. Therefore, a year of calculus at the undergraduate level is strongly suggested for all students. Those wishing to acquire more than the minimum exposure to the quantitative aspects of management should consider including in their undergraduate programs, in addition to at least a year of calculus, courses in linear algebra, probability theory, statistical theory, and computer programming.

Application Procedure

A completed application for admission to the M.B.A. or M.P.A. program consists of the following:

- (1) The application itself, completed on forms available from the Director of Admissions and Student Affairs, Graduate School of Business and Public Administration, Malott Hall, Cornell University, Ithaca, New York 14850. Candidates who wish to be considered for grant assistance must complete a separate application for financial aid.

- (2) A nonrefundable application fee of \$15 payable to Cornell University.

- (3) A report of test scores on the Admission Test for Graduate Study in Business. Applicants for M.P.A. candidacy may substitute test scores on the aptitude portion of the Graduate Record Examination. These tests are administered throughout the United States and in many major cities of the world by the Educational Testing Service. Inquiries and applications for taking the tests should be addressed to the Educational Testing Service, Princeton, New Jersey 08540. While the tests are administered four times each year, applicants should note that the November examinations are often most convenient for the School and for the candidate. Applicants are responsible for arranging to have their test results sent directly to the School. (*Note:* Applicants for the combined program in administration and law may substitute the Law Aptitude Test, the results

of which will be supplied to this School by the Director of Admissions of the Cornell Law School.)

(4) A transcript sent directly to the School by the registrar of each institution attended by the candidate beyond the secondary level.

(5) Two letters of reference on forms supplied by the School, preferably from persons who have taught the applicant and know him well.

Interviews are not required of prospective Master's degree candidates. They are often helpful in informing a student about the School and its programs, and may assist in appraising a student's eligibility for admission. Applicants should not feel compelled to visit the School unless time and distance permit it.

Admissions Timetable

New students are normally permitted to enter the School only at the beginning of the fall term in September. Admission in February is permitted only in unusual circumstances, because of the integrated and sequential nature of the School's core program. Applications for admission to the School should be filed as early as possible during the academic year preceding that for which admission is sought and in any event should be completed by April 1. Although the School occasionally acts favorably on applications received after April 1, opportunities for admission are greatly reduced after that date. Applicants are notified of their acceptance or nonacceptance as promptly as possible after their admissions folders have been completed.

Foreign Students

A candidate for admission from overseas must meet the same standards which are applied to other applicants. Not only must he be prepared academically to undertake a rigorous program of studies, but he must also be proficient enough in English to follow lectures closely, to participate actively in discussions, and to absorb a heavy program of reading and required papers and examinations. While the foreign applicant need not pay the \$15 application fee, he must otherwise complete the procedure outlined above. Foreign applicants whose native tongue is not English are also required to take the Test of English as a Foreign Language, administered throughout the world several times a year by the Educational Testing Service, Princeton, New Jersey 08540, U.S.A. Applicants

should correspond directly with the Educational Testing Service to arrange for this test.

Non-Degree Candidates

The School accepts a very limited number of qualified students who, because of special circumstances (e.g., one year's leave of absence from employment or a one-year fellowship for a foreign student) are not candidates for degrees. Admissions standards and procedures in such cases are the same as those for degree candidates.

In 1966 the School also instituted a non-degree program for mid-career executives, described under "Cornell Career Education Awards Program" on page 89. Further information is available in a special brochure which may be obtained from the School.

Combined Programs

The long-standing tradition of cooperation among the various units of Cornell enables the School to join in offering combined degree programs with several of the other schools and colleges on the Ithaca campus. Formal combined degree programs have been established with the College of Agriculture and the College of Engineering. Combined degree programs can also be arranged for students enrolled in the College of Architecture, the School of Industrial and Labor Relations, and the School of Hotel Administration. Admission to these programs is limited to particularly promising candidates, and careful planning is required if a successful integration of the work for the two degrees is to be achieved. Accordingly, Cornell students who are interested in completing the first-year requirements for the M.B.A. or M.P.A. degree during their last year of undergraduate studies in the schools and colleges listed above are advised to meet with the School's Director of Admissions and Student Affairs before the end of the first semester of the year preceding their last full undergraduate year.

Costs and Financial Assistance

Tuition and Fees

The charge for tuition in the Graduate School of Business and Public Administration is currently set at \$862.50 per semester, and the General

Fee of \$237.50 is also payable each semester. Tuition and fees thus total \$2200 for the full academic year. (*Note: New students who have not previously been enrolled at Cornell are also required to pay a \$35 matriculation fee upon entering the University. For additional information about the rules of payment at Cornell, see the *Announcement of General Information*, which may be obtained from the Visitor Information Center, Day Hall, or by writing to Cornell University Announcements, Day Hall, Ithaca, New York 14850.*)

Living Costs

Living costs cannot be stated with the same degree of certainty as regular University charges, since they depend to a great extent on the individual's tastes and circumstances. However, experience indicates that a single student now spends approximately \$400 for room, \$700 for board, and an additional \$550 for books, clothing, entertainment, and other personal items each year. Total costs, including tuition and fees but excluding transportation, generally come to about \$3850 for the full academic year for the single student and \$5500 for the married couple without children. The approximate expense for each child is \$300 for the ten-month academic year.

Fellowships, Scholarships, and Grants

A substantial number of fellowships, scholarships, and grants-in-aid are available for students enrolled in the School. Fellowships are based on scholastic ability, and scholarships and grants-in-aid are awarded on the basis of both scholastic ability and financial need. Applications for scholarships and fellowships by prospective Master's degree candidates must be filed by March 1 for the subsequent fall term, and new applications for the spring term must be filed by January 1. Application forms for financial assistance may be obtained from the School's Director of Admissions and Student Affairs. In addition to the general funds of the University which are made available for scholarship purposes, the following special awards may be noted.

The Bache and Company Fellowship, in finance.

The William H. Burns Scholarship of the Tompkins County Trust Company, awarded to a resident of Tompkins County.

The John W. de Forest Memorial Fellowship, awarded to a Canadian citizen who is a candidate for either the M.B.A. or the M.P.A. degree.



The du Pont Graduate Fellowship in Business Administration, awarded to an M.B.A. candidate with an undergraduate degree in a physical science or engineering.

The Deane W. Malott Fellowship of the Owens-Corning Fiberglas Corporation, in honor of Mr. Malott, President Emeritus of Cornell University.

The Martin McVoy Fellowships and Scholarships (with preference given to members of Alpha Delta Phi).

The Neal Dow Becker Scholarship Fund Awards.

The Price Waterhouse Foundation Scholarship, for study in accounting.

The Alfred P. Sloan Foundation, Incorporated, Fellowships and Scholarships, for study in hospital administration.

The Walter C. Teagle Memorial Fellowship of the Standard Oil Company (New Jersey).

The Theodore P. Wright Fellowship of the Cornell Aeronautical Laboratory, awarded to a student with undergraduate training in engineering.

Opportunities for Negroes in Business Education and Management

Several leading business firms are cooperating with the School in providing fellowships for qualified Negro students wishing to pursue the M.B.A. program. The firms sponsoring the program this year are *American Airlines, Inc.* and *Chase Manhattan Bank*. Information about the awards may be obtained from the School's Director of Admissions and Student Affairs.

General funds from which scholarships are awarded are provided by the following companies:

Goldman, Sachs and Company.

National City Bank of Cleveland.

Smith, Barney and Company.

Touche, Ross, Bailey and Smart.

Loans

The University's Office of Scholarships and Financial Aid in Room 105, Day Hall, administers University and National Defense Education Act loan funds. The Office may also recommend students for long-term loans through community banks under the new guaranteed-interest loan programs available in most states.

The W. K. Kellogg Foundation has established a loan fund for students in the hospital administration program. This fund is also administered through the Office of Scholarships and Financial Aid.

Composition of the Student Body

A large number of the School's students come from the Northeast and Middle Atlantic States, but other regions of the United States and more than ten foreign countries are also represented in the student body each year. More than half of the School's students did their undergraduate work in the liberal arts and sciences, roughly 25 per cent were engineering students, and about 10 per cent majored in business administration. The undergraduate colleges and universities represented in the current student body are listed in the table on the following page.

Student Activities

As a supplement to academic programs of the School, a range of activities is organized and administered by the student body. The objectives of these programs include the development of a professional attitude among students and the promotion of closer student-faculty relationships. The several activities described below also afford excellent opportunities for interested students to develop their organizational and administrative talents.

The Student Association

The student activities program is carried on under general sponsorship of the Student Association, with the guidance of its Executive Council. The President, Vice President, Secretary, and Treasurer of the Association are elected each February by the entire student body for one-year terms, and a representative from the first-year class is elected in September to serve until February. The remaining members of the Council are the appointed chairmen of various subsidiary committees and organizations. The Association's Social Committee sponsors frequent informal gatherings during the year. A fee of \$10 covers membership in the Association for the two years of residence at the School.

Institutions of Higher Learning Represented in the 1967-68 Student Body

U.S. Colleges and Universities

<p> Alfred University Allegheny College Amherst College Arizona State University Boston College Boston University Bowdoin College Brandeis University Brown University Bucknell University University of California Carleton College Carnegie-Mellon University Case Institute of Technology Clark University Colby College Colgate University Columbia University Concordia Senior College University of Connecticut Cornell College Cornell University Dartmouth College Davidson College Denison University De Paul University Duke University Eastern Mennonite College Fordham University Georgetown University Goshen College Grinnell College Hamilton College Hanover College Harvard University Hobart College College of the Holy Cross Howard University Illinois Institute of Technology University of Illinois Indiana University Ithaca College John Carroll University Lafayette College LaSalle University Lehigh University LeMoine College Manhattan College Manhattanville College of the Sacred Heart University of Maryland Massachusetts Institute of Technology </p>	<p> Michigan State University Michigan Technological University University of Michigan Middlebury College University of New Hampshire New Haven College New York University University of North Carolina University of Notre Dame Ohio State University University of Omaha Pembroke College Pennsylvania State University University of Pennsylvania University of Pittsburgh Princeton University Purdue University Rensselaer Polytechnic Institute University of Rhode Island University of Rochester Rutgers University St. John's University University of Scranton Stanford University State University of New York at Brockport State University of New York at Buffalo State University of New York Maritime College Swarthmore College Syracuse University Texas Western College Trinity College Union College Upsala College University of Utah Vanderbilt University University of Vermont Villanova University University of Virginia Washington and Lee University University of Washington Wesleyan University West Virginia State College Willamette University College of William and Mary Williams College University of Wisconsin College of Wooster Worcester Polytechnic Institute Yale University </p>
---	---

Foreign Institutions

<p> Birmingham University (England) Universidad de Bogota (Colombia) Catholic University of Louvain (Belgium) Universidad Catolica de Valparaiso (Chile) Universidad de Chile Universita Commerciale Luigi Bocconi (Italy) Faculty of Economics Ljubljana (Yugoslavia) University of Glasgow (Scotland) Universidad de Iberoamericana (Mexico) </p>	<p> Manchester University (England) McGill University (Canada) University of New Brunswick (Canada) Oxford University (England) University of Toronto University of Tokyo University of the West Indies (Trinidad) University of Western Ontario (Canada) Universidad del Zulia (Venezuela) </p>
---	--

The Management Forum and Supper Club

Over the course of the year, several prominent individuals from the world of business and public affairs are brought to the School to speak before students, faculty, and their guests. Some of the sessions with visiting speakers are presented by the Management Forum at a late morning hour set aside for that purpose. In other instances the guest speakers address the Supper Club at an evening gathering.

B&PA, Incorporated

Short-term loans are made available to members of the student body by this nonprofit organization. The disposition of its funds, which have been accumulated through gifts, subscriptions, and earnings, is governed by the student and faculty members of its Board of Directors.

Wives' Club

More than 30 per cent of the students attending the School are married. Their wives have formed an informal group which sponsors an interesting and varied program of activities throughout the year. The Wives' Club also works closely with the Social Committee of the Student Association.

AIESEC

AIESEC, the Association for the International Exchange of Students in Economics and Commerce, is an independent, nonprofit international organization established and operated by students from more than forty-three countries. Since 1956 the Graduate School of Business and Public Administration has sponsored AIESEC on the Cornell campus. AIESEC students interested in Area Studies may meet with business people and political leaders of developing nations and become involved in their political, sociological, and economic problems. For those interested in the economic aspects of a developing country, there is the opportunity to play a role in solving the problems of development, either in a private enterprise or a government agency. AIESEC places special emphasis on personal experience for the student working in a foreign business. The participant is also offered the opportunity to work, train, and live in a foreign culture.

Student and Alumni Services

Housing

Although many students prefer to live in private dwellings or apartments, University housing is available for both single and married students. Sage Graduate Center, in the heart of the Cornell campus, provides housing and dining facilities for single students who are candidates for advanced degrees in any field, and the University maintains three modern housing developments for married students with both one- and two-bedroom apartments available. Applications for University-operated housing should be made through the Department of Housing and Dining Services, Day Hall, Cornell University, Ithaca, New York 14850. Information regarding off-campus accommodations is available from the Off-Campus Housing Office in the Department of Housing and Dining Services. (*Note:* Rooms in Sage Graduate Center are assigned from July 1 to August 15 in order of the date of receipt of application.)

Dining Arrangements

The University operates a wide range of dining facilities which are convenient both to housing accommodations and to Malott Hall, the home of the Graduate School of Business and Public Administration. Meals are served regularly in Willard Straight Hall (the student union building), Sage Graduate Center, Martha Van Rensselaer Hall, Stocking Hall, Noyes Student Center, and Noyes Lodge (a student facility located on Beebe Lake, not far from the School).

Student Counseling

Each student is assigned to a faculty adviser for academic counseling. Advisory relationships are informal, however, and students are urged to consult widely with members of the faculty on matters relating to their education and future plans. The School's Director of Admissions and Student Affairs and the Director of Placement and Alumni Affairs are also available for counseling purposes. The International Student Office in Day Hall maintains a staff to assist in meeting the special counseling needs of students from other countries. Foreign students are urged to avail themselves of this service and to call upon the staff of the International Student Office for assistance on such matters as living quarters and

other aspects of their needs in Ithaca. It is suggested that foreign students write to the Director of the International Student Office before they come to Ithaca or call upon him when they arrive.

Placement

To assist graduates in exploring and selecting among various employment possibilities, the University and the School operate an extensive placement program. Under the aegis of the University Placement Service, a large number of representatives of business organizations and governmental agencies come to the campus each year. The School's Director of Placement and Alumni Affairs coordinates a program in which many business and government representatives interview prospective graduates of this School in Malott Hall.

Alumni Services

The Business and Public Administration Alumni Association maintains liaison between the School and some sixteen hundred and fifty graduates associated with private and public organizations in this country and overseas. The School's alumni assist in various activities of the School, including serving as guest lecturers in advanced seminars, providing case materials, and interviewing for the School's admissions program. The placement program of the School is at the disposal of the School's alumni, as is the University Placement Service, which maintains offices both in Ithaca and in the Cornell Club of New York City (at 155 East 50th Street).

Further Information

Prospective students are urged to consult Cornell University's *Announcement of General Information* for details regarding health requirements and services, vocational testing and guidance, the use of motor vehicles, and University-wide social and cultural activities. Copies of that Announcement may be obtained from the Visitor Information Center, Day Hall, or by writing to Cornell University Announcements, Day Hall, Ithaca, New York 14850.



V. DOCTORAL AND RESEARCH PROGRAMS

Approach and Content of the Doctoral Program

Studies for the Ph.D. degree in the field of business and public administration are designed to prepare candidates for careers in teaching and research. Accomplishment is judged not primarily by the fulfillment of assigned courses but rather by the development of the depth of understanding essential to the advancement of knowledge. Course credits as such are not accumulated, but the candidate must complete a study program worked out by his Special Committee. The requirements for the Ph.D. degree are established and administered by the Graduate School of Cornell University. Business and public administration is one of a number of fields of study offered by the Graduate School. A prospective student should therefore obtain the *Announcement of the Graduate School* and study it carefully.

The candidate for the Ph.D. degree in business and public administration is required to select a major subject in this field and two minor subjects. For his Special Committee, which directs his studies, he selects faculty members representing those subjects. The major subject must be selected from either Group I or Group II as detailed below. The first minor must be selected from the group not used for the major, with exceptions as indicated below:

Major and Minor Subjects

Group I

- Managerial Economics
- Organizational Behavior and Theory
- Quantitative Analysis for Administration*

Group II

- Accounting
- Business Policy
- Finance

* These two subjects may not be taken together as major and first minor.

Business and Public Policy
International Development
Marketing
Transportation Economics and Policy
Medical Care Organization and Administration
Production and Operations Management*
Public Administration
Administration of Higher Education (Minor subject only)

It is recognized that some candidates electing a major subject in Group II may wish to take a first minor in a basic discipline offered in another field of the Graduate School. This is permitted whenever the proposed subject meets the test of being a basic discipline reasonably related to the student's major subject. Also, some candidates electing a major subject in Group I may wish to take their first minor in an applied subject offered in another field. This is also permitted in cases where the candidate can demonstrate that the change is relevant to his career objectives. To secure uniform administration of these exceptions the field requires that all substitutions in Groups I and II be approved by the Chairman of the Committee on Advanced Degrees.

The field requires that the first minor be relatively extensive, and that it require a level of competence equivalent to that required of majors. The second minor may be selected from the above subjects or from another field. If the first minor is not taken outside of this field, a student may be encouraged to take the second minor in another field, provided that this minor is relevant to his program. An outside minor is normally taken either in an underlying discipline or in an area of applied knowledge related to the program of this field.

A short description of the major subjects in the field of business and public administration follows:

Group I

Managerial Economics concentrates on economic analysis for decision making. A candidate may study the problems of the total economy, of industries, or of the firm, and may do so within the context of any particular study area, such as international economic relations, economic development, business-government relations, money and banking, invest-

* These two subjects may not be taken together as major and first minor.

ment project analysis, or transportation. He is expected to develop a thorough grasp of relevant economic theory and institutions and a basic understanding of both qualitative and quantitative analysis.

Organizational Behavior and Theory focuses on social- and behavioral-science approaches to the study of human activity in organizational settings. The major concern is with regularities, differences, and relationships in human behavior directed toward purposive ends. Systematic observation, theoretical analysis, and empirical investigation are stressed. A fundamental grounding in at least one of the basic behavioral disciplines is required.

Quantitative Analysis for Administration stresses the modern developments in the uses of mathematical and statistical tools and computer technology for the solution of managerial problems, including decision making under uncertainty.

Group II

Accounting involves the study of the theory and practice of developing financial data for the two ends of enabling to control and plan the development of the enterprise and of enabling others to appraise its condition.

Business Policy involves the study of the business corporation, and particularly of the strategy developed to meet various problems, both internal and external. A substantial knowledge of the functional areas of marketing, production, finance, and personnel and labor relations, and of accounting and control is essential.

Finance focuses on the financial structures and requirements of corporations, on the problems of developing and maintaining sound financial condition, on the organization and behavior of financial markets of various types, and on the influence of public policies at home and abroad on these markets and on corporate finance. A knowledge of accounting is essential.

Business and Public Policy involves the study of the three-way relationship among individuals, business firms, and government. Emphasis may be either on the United States or a foreign area. A substantial knowledge of the political and economic background of public policies is essential. Emphasis is placed on the impact of public policies and regulation on

business and of business policies on government, and on the problems of developing socially desirable policies in both the public and private sectors.

International Development emphasizes the study of the problems of developing effective public and business institutions in developing parts of the world, with special emphasis on problems of administration, public and private, both indigenous and American, in such areas. A good background in one or more of the basic disciplines of economics, government, sociology, or anthropology is highly desirable for this subject area.

Marketing involves the study of how the analytical tools derived from economics, psychology, sociology, and operations research can be applied in the development of operational and policy aspects of the marketing function.

Transportation Economics and Policy is the study of the economics of an important business function influencing the geographical structure of economic life, and of the associated problems of carriers, shipper and travelers, and governments.

Medical Care Organization and Administration comprises the study of the complex problems of administration, public policy, and private health plans, both in hospitals and in the larger framework of public agencies and private firms.

Production and Operations Management concentrates on the major economic decision problems involved in production and operations management. Various analytical techniques are used, and their effectiveness and limitations are explored.

Public Administration involves an interdisciplinary approach to the study of governmental policies, policy formulation, power relationships, administrative behavior, basic management functions such as personnel and finance, and the broad environment of public affairs. The student is expected to gain competence in bureaucratic and organizational theory, and in the methods of the social sciences.

Administration of Higher Education (minor subject only) focuses on the application of behavioral, economic, and quantitative methods of analysis and of such applied subjects as accounting and finance to the peculiar problems of the large American university.

Candidates for advanced degrees with majors in other fields may elect minors in this field provided that they have sufficient preparation to do

the graduate work involved. Twelve to fifteen hours of work are normally required as a minimum for a minor, depending on the degree sought and the extent of a candidate's preparation.

Requirements

Shortly after the candidate enrolls a qualifying examination, usually both written and oral, is given in order to determine whether he is properly prepared to continue in the subject areas he has selected. The qualifying examination also serves as a basis for the Special Committee to assist the student in working out his program of study. A comprehensive examination is given on the major and minor subject areas after the candidate has had adequate preparation therein, ordinarily after four terms of residence have been completed. The comprehensive examination is always given in two parts, written and oral. A thesis is required and is prepared under the direction of a Committee member. After a manuscript has been approved in substance by the Committee, an oral thesis examination is given.

The Ph.D. candidate is also required to demonstrate reading proficiency in one foreign language, chosen from among French, German, Italian, Russian, Spanish, and Swedish. With the approval of a student's Special Committee, another language having either a substantial scholarly literature or significant utility in the student's research plans may be substituted. A student whose native language is not English may substitute reading, writing, and speaking competence in English. Any Special Committee may require more than one language or greater competence in one language.

A minimum of six terms of full-time residence beyond the Bachelor's degree is a requirement for the doctorate, but under certain circumstances residence credit may be received in whole or in part for graduate work done elsewhere for the M.B.A. or M.P.A. degree or in other relevant graduate programs. Such transfer of credit may be allowed by the Graduate School on recommendation of a student's Special Committee after matriculation, but it is by no means automatic. Ordinarily two terms of residence credit toward the doctorate are granted for the completion of a four-term professional Master's program. However, a candidate for the M.B.A. or M.P.A. degree at Cornell, if he so elects during the first year, may be placed under the direction of a special committee within the School and will then follow a more research-oriented program than



McGraw Tower and John M. Olin Library.

is usual in the Master's program. By so doing he may receive up to three terms of residence credit toward the doctorate upon completion of the M.B.A. or M.P.A. degree. In such instances a Master's thesis and a comprehensive oral and written examination are required.

Admissions and Financial Assistance

Applications for admission to the doctoral program should be made on the forms of the Graduate School of Cornell and should be sent to The Graduate School, Sage Hall. They should clearly indicate in the appropriate place a major interest in the field of business and public administration. All applicants, whether from the United States or abroad, are required to take either the Graduate Record Examination (Aptitude

Test) or the Admission Test for Graduate Study in Business. These tests are given several times a year in the United States and abroad. For information about the examinations, candidates should write to the Educational Testing Service, Princeton, New Jersey 08540.

Eligibility for admission is determined on the basis of the quality of an applicant's academic record, the suitability of his prior work for the intended program, the opinions expressed in letters of recommendation, the career objectives of the candidate, and his test scores. In general, students without prior work in the appropriate disciplines and in the institutional environment should take a professional degree first or otherwise make up their deficiencies. Students having strong undergraduate preparation in one or more of the social sciences can proceed directly to graduate work in this field but should plan to remedy any deficiencies with respect to the various aspects of administration. Candidates with undergraduate work in business or public administration may be prepared to enter the doctoral program, but they will often be required to develop a more adequate foundation in the social sciences. Thus, while preparation for graduate study in important segments of the student's program is necessary, the possession of a Master's degree, though common, is not essential.

The School has funds available for the support of Ph.D. candidates through fellowships and assistantships, primarily the latter. These are awarded on a competitive basis to both new and continuing candidates, with renewals based on the student's academic performance. In addition to the fellowships and assistantships offered by the School, a number of University fellowships and scholarships are available and are awarded in a general competition which closes in February.

Further information on admissions and financial aid may be secured by writing to the Director of the Doctoral Program, Graduate School of Business and Public Administration, Cornell University, Ithaca, New York 14850.

Research Programs

Through its research program the School seeks a combination of related objectives: the advancement of basic knowledge, the utilization of that knowledge in teaching programs, and the further encouragement of both faculty and graduate students in the use of research for decision making and other administrative purposes.

The School has stressed empirical studies of business firms, governmental agencies, hospitals, and similar enterprises. Here management is observed in interaction with its environment, and research is focused on the ways in which objectives are determined, resources are acquired and controlled, and activities coordinated. This approach not only breaks new ground in organizational analysis but also provides a base for theory. Studies of this type have included a large-scale analysis of the social origins, training, and career patterns of federal governmental executives, a community power structure survey, an analysis of state capital budgeting policies and procedures in the U.S., a survey of banking policies with regard to the handling of cash and marketable securities, studies of hospital organization and operation, an examination of the policy formulation processes of various business enterprises, a broad inquiry into organizational and economic trends in the field of agricultural industries, and an analysis of the top-level decision-making process in the National Aeronautics and Space Administration. Other ongoing research efforts concern the development of capital budgeting in both business and government, the study of executive personality, the comparative analysis of the effects of centralization and decentralization in two large concerns, the development of concepts of managerial accounting, an investigation of the economics of the steel industry in Western Europe, work on the modernization and political development of the less developed parts of the world, empirical study of employee job attitudes and motivation, and work on the integration and use of behavioral-science findings in organizational activity.

The School maintains close association with University-wide agencies concerned with social and organizational research, particularly the Cornell Social Science Research Center and the Cornell Computing Center, the facilities of which are available to students in the School. The research program provides a number of stipends as well as training and dissertation opportunities for advanced graduate students.

Publications

Since 1956 the School has published the *Administrative Science Quarterly*, a scholarly journal concerned with advancing the basic understanding of administration through empirical investigation and theoretical analysis. The *Quarterly* contains articles, book reviews, and abstracts relating to administration in several types of enterprises and environ-

ments, including business, governmental, hospital, military, and educational. Special issues of the *Quarterly* are published occasionally. The subject of the most recent one is Universities as Organizations. Inquiries relating to the *Administrative Science Quarterly* should be sent to the Editor, in care of this School.

The School also publishes books and monographs on various aspects of administration and policy. A series entitled *Cornell Studies in Policy and Administration* includes *Measurement and Evaluation of Organizational Performance* (an annotated bibliography) by Paul Wasserman; *Decision-Making: An Annotated Bibliography* by Paul Wasserman and Fred Silander; *Management Decisions for Cash and Marketable Securities* by Harold Bierman, Jr., and Alan K. McAdams; *The Decision-Making Process in the Commercial Use of High-Speed Computers* by Ernest Dale; *Amateur Speculators: A Survey of Trading Styles, Information Sources, and Patterns of Entry into and Exit from Commodity Futures Markets by Non-Professional Speculators* by Seymour Smidt; *Investment and Liquidity: A Case Study of Clay Construction Products* by Richard S. Bower; and *Research Parks from the Community Viewpoint* by G. David Hughes.

Library Resources

The Eastwick Library of the Graduate School of Business and Public Administration now contains more than 90,000 volumes on the administrative process and on various aspects of business and public affairs. The Library, which is housed in Malott Hall, has comfortable facilities for readers, including a large number of open and locked carrels. The Library maintains files of periodicals, journals, financial and advisory services, government publications, and selected company reports.

A reference collection is maintained and professionally staffed to provide direct assistance to students in the solution of academic and research problems.

In addition to the Library of the School, the John M. Olin Graduate Research Library and other Cornell libraries, notably that of the School of Industrial and Labor Relations, are also open to students of the School. The government documents collection of the University Libraries is one of the largest in the country. Altogether the library holdings of the University total over 3,000,000 volumes, making Cornell one of the major library research centers in the United States.



*Panel discussion
in Bache Amphitheatre.*

VI. SPECIAL PROGRAMS

The School develops and conducts institutes, seminars, conferences, and other types of special training programs to meet the needs of business organizations, governmental agencies, and hospitals and health organizations. These programs are tailored to the requirements of the participating groups and vary in length from a few days to several weeks. They are usually conducted on the University's Ithaca campus, thereby gaining the full advantage of resident faculty participation, libraries, and University housing arrangements. The programs presently offered are described below.

Cornell Executive Development Program

The Executive Development Program offers an intensive six-week seminar designed to contribute to the continuing education of executives for management. Participants are brought together with professors and business and government leaders to explore management's task in the face of accelerating technological change and mounting social, economic, and political demands. The program was established by the Graduate School of Business and Public Administration in 1953. Since that time more than 700 executives have participated in the annual sessions.

The method of the program is to engage each participant in a broad study of the role of management for the purpose of increasing that awareness so important to effective and responsible executive leadership. The program is designed, accordingly, to facilitate an examination of the expanding consequences of executive decisions and the broader considerations governing company policy. Each participant is encouraged to take a company-wide viewpoint, to search out and apply financial and economic standards in the formulation and appraisal of company policies, to become more sensitive to the elements of effective organization and more enlightened ways of enlisting human effort, and to heighten his awareness of environmental factors which affect managements' ability to control the firm's future and which impose new responsibilities on the exercise of authority. The case method of instruction is employed exten-

sively. For those who wish to participate on a voluntary basis, special sessions are conducted on quantitative approaches to decision making and on improving reading skills, management use, the computer, and interpersonal relations.

The seventeenth annual Executive Development Program will begin in late June, 1969. Applications should be submitted by March 1, 1969.

Health Administrators Development Program

The Health Administrators Development Program offers to a selected group of experienced administrators and planners a four-week course of lectures, readings, and discussions dealing with a broad spectrum of trends and issues affecting their responsibilities. Health leaders from all parts of the United States, Canada, and overseas are brought together in stimulating contact with resident and visiting faculty members chosen for their ability to contribute to a better understanding of medical care policy, comprehensive health planning, and administrative and technological developments.

The eleventh annual Health Administrators Development Program will be offered in June and July, 1969.

Agribusiness Executives Program

The Agribusiness Executives Program is an intensive two-week educational program presented specifically for management personnel serving the agricultural sector of the economy. The program is designed to help managers in their efforts to keep abreast of the rapidly changing nature of the agricultural industries. The program focuses on long-range planning as an aid to sound decision making.

The sixth annual Agribusiness Executives Program will be offered during the summer of 1969.

Cornell Institute for Administrators of Long-Term Care Institutions

In the summers of 1967 and 1968, the Sloan Institute of Hospital Administration and the New York State College of Home Economics jointly sponsored two-week summer institutes for administrators of long term care institutions. The programs were designed to help participants meet rising standards for patient care, to establish closer relations with

other health care institutions and agencies in their communities, and to coordinate their efforts with those of the total health care system.

It is anticipated that similar programs will be continued. Further information may be obtained from Mrs. Miriam T. Dolson, Ph.D., Sloan Institute of Hospital Administration, Malott Hall, Cornell University.

Cornell Career Education Awards Program

Cornell University conducts a nine-month, nondegree, educational program for a limited number of mid-career executives from government and business. This undertaking, coordinated by the Graduate School of Business and Public Administration, is part of the Career Education Awards Program sponsored by the National Institute of Public Affairs.

Taking an interdisciplinary and flexible approach, the program focuses on the relationships between public and private organizations and on the problems which arise in those relationships in contending with major issues of domestic and international policy. In developing curricula appropriate to their respective needs and aspirations, participants avail themselves of graduate course offerings and develop close associations with appropriate faculty members throughout the University. They participate in a special, year-long seminar designed to integrate their individual study programs into a sophisticated exploration of business-government relations.

Further information concerning this program is set forth in a special brochure which may be obtained by writing to the School.

Food Distribution Program

A cooperative program in food distribution, carried on by the College of Agriculture and the Graduate School of Business and Public Administration, is designed to provide full-time academic training for those already employed in the food manufacturing and distribution industry and for students who wish to combine a study of the fundamentals of business administration with a study of food distribution. Three types of training are offered: (1) "special" student training, usually for one year, for those who are not interested in becoming candidates for degrees, (2) four-year undergraduate degree training for those who desire broad training with specialization in the food distribution field, and (3) graduate work leading to the Masters' and Doctors' degrees for qualified students who have Bachelors' degrees. Students in the Graduate School of Business

and Public Administration may elect this program as a field of concentration during their second year of study.

Special students and four-year undergraduate students register in the College of Agriculture. Candidates for the graduate degrees register in the Graduate School and take their major in agricultural economics. The National Association of Food Chains has made available a number of fellowships of \$1500 each for employees in the food industry. Further information may be obtained by writing to Professor Wendell Earle, Food Distribution Program, Warren Hall, Ithaca, New York 14850.

International Programs

Over the last several years the School's faculty has become increasingly committed to participation in projects with an overseas focus. These projects serve the twin objectives of assisting in the development of foreign institutions and generating expanded opportunities for international studies in the School.

In 1962 the School entered into a contract with the Agency for International Development, under which it agreed to participate in the development of a program in business administration at the Middle East Technical University (METU) in Ankara, Turkey. Under this contract sixteen members of the staff of METU have come to Cornell and other universities for degree programs in business administration, and eleven professors have gone to Ankara for periods ranging from one to three years. The contract will terminate in 1969.

In 1964 the School initiated a Latin American Internship Program in Business and Public Affairs as part of the Overseas Professional Service Fellowship Program supported by the Ford Foundation. This experimental program was designed to increase the number of professionally trained young U.S. citizens with knowledge of and experience in Latin America. Now in its final year, the Internship Program has sent three groups of individuals who hold Masters' degrees in business or public administration, or in other fields to assignments as regular members of indigenous governmental agencies or business firms in Chile, Colombia, Mexico, Peru, and Venezuela. The training of the Interns, which emphasized intensive learning of the Spanish language and Latin American studies, was conducted at Cornell during the summer. The last group of Interns will complete their assignments in the spring of 1969.

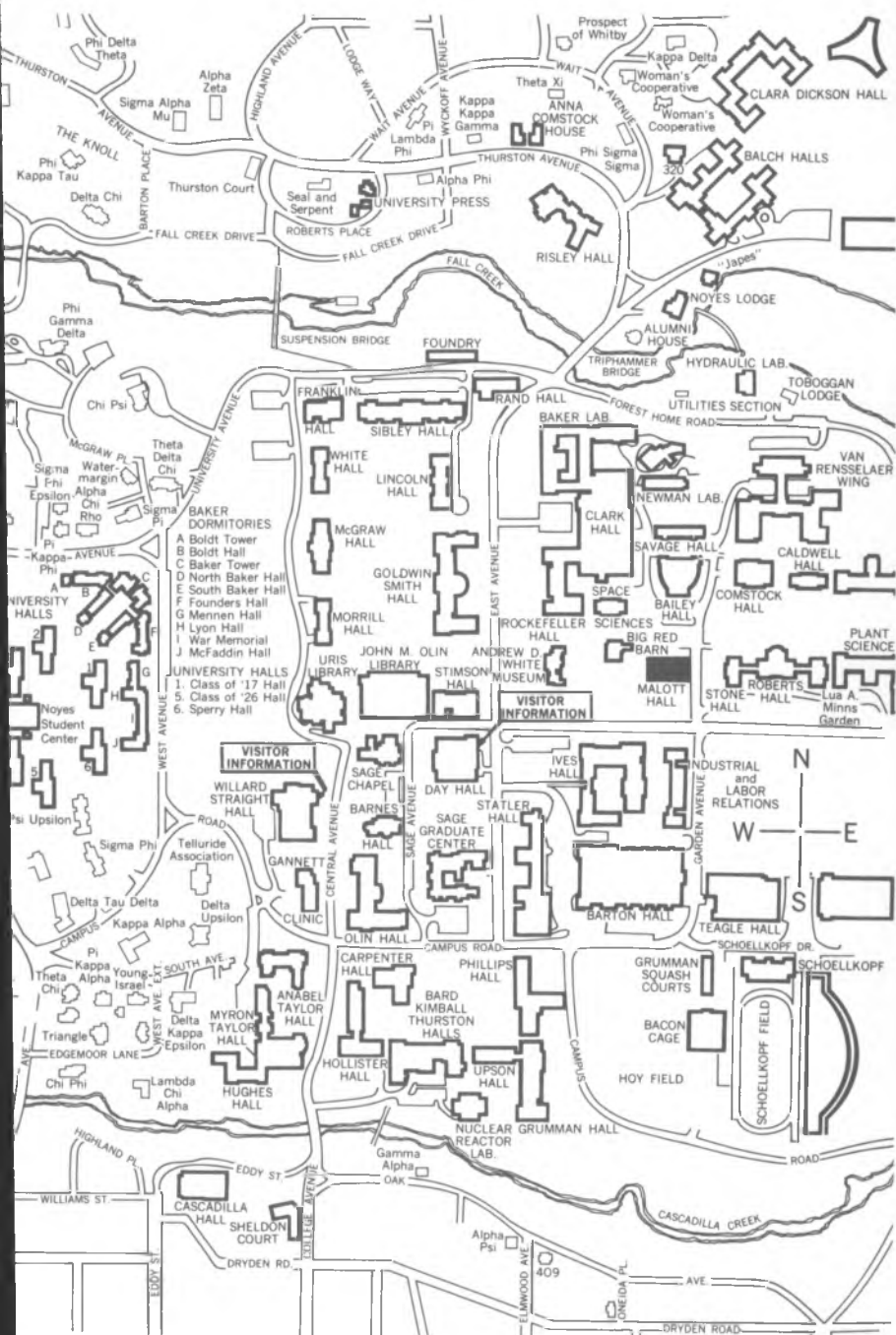
During the past four years the School has cooperated in the establishment of programs in management at the University of the West Indies

Each year four Cornell professors have participated in four-week management development programs in Trinidad, and shorter programs have also been held. Members of the School's faculty are serving as consultants to officers of the University of the West Indies. Graduates of this School and other divisions of the University are engaged in teaching and research in Trinidad, and several students from Trinidad have received advanced degrees at Cornell.

COURSE INDEX

010. Directed Reading and Research	60
101S. Personnel Management and Human Relations	61
112S. Managerial Accounting	61
120. Organization Theory and Behavior	33
121. Personnel Administration and Human Relations	52
122. Managerial Accounting	34
123. Quantitative Methods for Management I	34
123A. Quantitative Methods for Management II	34
124. Economic Analysis for Management I	34
125. Economic Analysis for Management II	35
126. Marketing	36
127. Operations Management	36
128. Finance	37
129. Issues in the Environment	35
130. Management of Public Agencies I	37
131. Management of Public Agencies II	38
140. Introduction to Hospital and Medical Care Organization	38
141. Introduction to Clinical Medicine and Public Health	38
142. Sociology of Community Health Care	43
200. Business Policy	37
202. Business Enterprise and Public Policy	48
300. Intermediate Accounting	39
301. Advanced Accounting	39
302. Cost Accounting	39
303. Seminar in Financial Policy and Managerial Accounting	40
304. Seminar in Financial Accounting	40
305. Federal Taxation and Decision Making	40
306. Governmental Accounting	40
308. Law of Business Associations	40
309. Advanced Business Law	41
325. Seminar in Management of Agricultural Industries	59
352. Public Relations and Communications Cases and Problems	59
375. Economic and Business History	48
376. Business Policy and Economic Instability	49
377. Competitive Behavior and Public Policy	49
379. Economic Evaluation of Capital Investment Projects	49
380. Managerial Economics Workshop	50
402. Quantitative Approaches to Management Decisions	56
424. Analysis of American Industries	50
426. Financial Management	41
427. Investment Management	41
428. Governmental Fiscal Management	41
429. Financial Intermediaries and Money and Capital Markets	42
430. Money and Banking	42
432. Capital Financing Seminar	42
433. Seminar in Organized Markets	42
450. Evaluation of Community Health Services	43
451. Psychiatric Institutions: Administration and Practice	43
452. The Health Planning Process	43
453. Legal Aspects of Hospital Administration	44

454.	Policy and Planning for Health Care	44
455.	Seminar in Health Research	44
456.	Seminar in Quantitative Methods	57
457.	Health Economics	44
458.	Health and Welfare Policy: Foundations and Strategies	45
475.	Sales Management	50
476.	Marketing Research	50
478.	Advertising Management	51
480.	Marketing Strategy	51
481.	Seminar in Marketing Theory	51
482.	Seminar in Marketing and the Management Sciences	51
500.	Human Relations in Administration	52
501.	Public Personnel Management	52
502.	Organizational Behavior and Administration	52
503.	Business and Industrial Personnel	53
525.	Problems and Techniques in Production Management	53
526.	Case Studies in Production and Operations Management	54
550.	Politics and Political Power	54
553.	Theory and Practice of Municipal Finance	54
554.	Seminar in Urban Government and Administration	55
555.	Issues of Public Policy and Administration	38
556.	Seminar in Public Administration	55
557.	Human Resource Development Problems in the Metropolis	55
558.	Case Studies in Human Resource Development Planning	55
559.	Current Issues in Science, Technology, and Public Policy	56
560.	Seminar in Urbanization and Regional Development	56
575.	Transportation: Rates and Regulations	58
576.	Transportation: Structures, Operations, and Policies	59
600.	Introduction to Probability Theory	57
601.	Introduction to Statistical Theory	57
602.	Operations Research I	57
604.	Operations Research II	58
605.	Data Processing Systems	58
625.	International Business Policy	45
626.	International Marketing	45
627.	American Business Operations Abroad	46
628.	Seminar in International Business	46
629.	Administration of Public Operations Abroad	46
630.	Seminar in Ideology and Political Change	46
631.	Seminar in Political Development and Social Change	47
632.	Seminar in Administration and Development	47
633.	Comparative Public Administration	47
634.	Political and Economic Change in Contemporary Europe	47
635.	Approaches to the Analysis of Subjective Culture	48
636.	City and Regional Planning in Latin America	48
750.	Seminar in Business-Government Relations I	56
751.	Seminar in Business-Government Relations II	56
800.	Management Surveys and Analysis	60
801.	Data Processing Systems	58
802.	Seminar in Organization Theory	53
803.	Current Research in University Administration	53
805.	Seminar in Research Methods	60
807.	Special Topics in Organizational Theory and Behavior	53
808.	Seminar for Doctoral Candidates	61
925.	Honors Seminar	60



The Graduate School of Business and Public Administration is housed in Malott Hall, the heavily shaded building on the map.